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# Knowledge and Perceptions of a Visual Communications Curriculum Unit in Arkansas Secondary Agricultural Classrooms: An Impact of Experiential Learning

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**Knowledge and Perceptions of a Visual Communications Curriculum Unit in  
Arkansas Secondary Agricultural Classrooms:  
An Impact of Experiential Learning**

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Arkansas Secondary Agricultural Classrooms:  
An Impact of Experiential Learning**

**A thesis submitted in partial fulfillment of  
the requirements for the degree of  
Master of Science in Agricultural and Extension Education**

**By**

**Kristin Mackenzie Pennington  
University of Arkansas  
Bachelor of Science in Agricultural Education, Communication and Technology, 2010**

**May 2012  
University of Arkansas**

## **ABSTRACT**

Currently, a need exists for agricultural education programs to begin introducing new curriculum which will help meet the current and future needs of the agricultural industry. In 2010, the University of Arkansas Agricultural and Extension Education Department received grant funding for the development of curriculum relating directly to visual communications technology and its role in agricultural communications. Curriculum was developed and teachers across the state were asked to participate in implementing the program. The primary purpose of this study was to evaluate the knowledge levels of students prior to being taught agricultural communications curriculum, after the curriculum was taught, and again after students participated in a day-long experiential learning activity utilizing the skills taught throughout the curriculum; students' perceptions were also assessed. Additionally, a content analysis was completed to assess the ability of students to apply skills learned in the curriculum. Eleven schools participated in the study. A significant difference was seen in test scores for each curriculum (photography, writing, and videography) unit. Overall, students had positive perceptions of the curriculum and the experiential learning activity. Also, the content analysis showed that students were able to apply skills taught via the curriculum and successfully conveyed stories and messages by producing short promotional videos about agriculture. The study found that the curriculum was successful in increasing student knowledge of visual communications as it relates to agricultural communications.

**This thesis is approved for recommendation  
to the Graduate Council.**

**Thesis Director:**

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**Dr. Leslie D. Edgar**

**Thesis Committee:**

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**Casandra Cox, MS**

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**Dr. Donald M. Johnson**

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**Dr. Dennis Beck**

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**Refused** \_\_\_\_\_  
**Kristin Mackenzie Pennington**

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To start, I would like to thank my committee members. Dr. Leslie Edgar served as my graduate advisor and committee chair. Her guidance and assistance throughout this project has been vital to its success. She has been a constant source of knowledge and encouragement in both my course work and thesis preparation. She has been a wonderful mentor and leader and I am fortunate to have worked with her. Casandra Cox was a committee member and co-investigator of the grant which funded this project. She has been a valuable source of information while completing this study. Casandra has helped develop and restructure the curriculum and attended numerous visits to the schools. She has always made time to talk with me about school and everyday life. I would like to acknowledge the two remaining members of my committee; Dr. Don Johnson and Dr. Dennis Beck. Both have helped guide this study and provided generous feedback throughout the process. Neither one were directly involved in writing curriculum or traveling to schools which allowed them to stay objective and ensure that my thesis was written with clarity.

Next, I would like to acknowledge Dr. Don Edgar. Dr. Edgar has mentored my agriculture education endeavors since my undergraduate days. He has been a never ending source of knowledge and encouragement throughout my college career. His guidance has been crucial to my success.

Last, I would like to thank the University of Arkansas Division Of Agriculture for providing the *Division of Agriculture Land Grant Fellowship* which funded my graduate work.



## **DEDICATION**

This thesis is dedicated to my husband, Nathan. The past few years would not have been as fun, or worthwhile without his love and support. He has been there through every frustration as well as every success of my post-secondary education. He is a Godly, hardworking, and loving husband. Ephesians 5:25 says “Husbands, love your wives, just as Christ loved the church and gave himself up for her ...”. It is amazing to think of the magnitude of the Lords love by comparing it to Nathan’s love for me. He is my best friend, and I love and appreciate all he has done in support of me.

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## **CHAPTER I: INTRODUCTION**

### **Need for the Study**

The National Research Agenda [NRA]: Agricultural Education and Communication 2011-2015 (Doerfert, 2011) was developed, and outlined critical components of agricultural education and communications. Agricultural education and communications faculty have forged alliances and work closely to develop courses and research projects to understand and promote various aspects of the industry. With the growing availability of technology and as the general public becomes further removed from the farm, communication becomes ever critical to the promotion of agriculture (Bailey-Evans, 1994).

“As agricultural education enters the twenty first century, it [education and agriculture] must change with emerging trends in society and the agricultural industry” (Talbert, Vaughn, & Croom, 2005, p. 61). Additionally, agriculture as a field of study continues to diversify and change, aiming to meet the needs of producer and commodity groups. This change and diversification brings the need to more effectively communicate and promote agriculture to an audience who is uneducated about agriculture and its practices. Agricultural communicators use digital technologies to disseminate messages throughout media outlets. Many agricultural education courses are built on a foundation of constructivist theory and experiential learning which opens the doors for students to learn about and use these technologies before entering degree programs or the workforce.

In 1999, the National FFA Organization, a student organization associated with agricultural education in secondary and post-secondary schools, organized the first career development event (CDE) for agricultural communications. Since that time the National FFA organization has gathered resources for agricultural science teachers to utilize when teaching

students about agricultural communications. The national organization's website has links to numerous resources including *The Guidebook for Agricultural Communications in the Classroom*. The guidebook, which outlines basic materials for teaching a course or unit as well as training a team, begins with:

Agricultural communicators play a vital role in the world of agriculture. Representing agriculturalists across the world, these individuals possess the skills to effectively communicate agricultural messages to public involved and not involved in agriculture. Because a large percentage of the population lacks agricultural understanding, it's important for agricultural communicators to provide timely, accurate information on current issues and events (Hartenstein, 2002, p. 1).

Upon completion of a national Delphi study, Akers, Vaughn, and Lockaby (2001) concluded that high school seniors should be competent in 76 skills of agricultural communications. The major themes surrounding those competencies included (a) agricultural skills, (b) communication skills, (c) ethics, (d) professional development, (e) public relations, (f) research gathering, and (g) writing. The study concluded these skills should be taught at various levels throughout the freshmen, sophomore, junior and senior educational levels. It is suggested that an introduction, intermediate, and advanced course be developed for teaching agricultural communications competencies and skills.

Postsecondary and secondary education today is a dynamic educational environment as new electronic technologies and their educational potential emerge. Additionally, agricultural communications is an important and valuable discipline. However, little agricultural communications curriculum exists in secondary school programs. By teaching high school student's communications and technology skills, they learn valuable skills while supporting and promoting the agricultural industry.

## **Description of the Program**

The Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program was initiated during the summer of 2010. The goal of the program was to assist high school students with creating short promotional videos about agriculture. The program's audiences are Arkansas secondary agricultural science teachers and students enrolled in agricultural science courses. The target objectives included: (1) developing electronic agricultural communications curriculum, (2) create a mobile classroom to educate teachers and students about visual communication technologies, and (3) assist high schools throughout Arkansas in the development and creation of YouTube videos to promote and market agriculture.

The curriculum developed included three educational units, and was disseminated to participating secondary schools in Arkansas prior (no less than four weeks) to the mobile classroom visit. The instructional modules support student/teacher knowledge and skill development in the three specific agricultural communications areas: writing, photography, and videography. Secondary agricultural science teachers may incorporate this curriculum into any course which they teach. After high school teachers finished teaching their students the curriculum, a mobile classroom was used to assist the secondary students in shooting footage and digital images, editing photos and video, combining the visual formats, adding title scripts, music, and credits (specifically to the USDA). The completed videos were rendered by the project staff and posted to YouTube.

Prior to participating in the educational curriculum units and the mobile classroom visit, secondary students were evaluated (pre-assessment) to determine current knowledge in writing, photography, and videography. Upon completion of curriculum units, students were evaluated

(post-assessment) for knowledge gained and for perceptions. Students were assessed for the final time after completion of the experiential learning activity. Assessments were used to periodically adjust educational units and the hands-on mobile classroom training experience. On the day of the mobile classroom visit students began by reviewing the basic information which had been covered by their teachers prior to the visit. Students then spent three hours refining their stories, taking photos and capturing video clips to tell the agricultural related story they had written. During the afternoon, students used professionally accepted software to edit both the photos and video. Upon completion, student-created agricultural videos were posted to YouTube.

### **Problem Statement**

Since the invention of television and computer, as well as the World Wide Web, the roles of visual messages in communication have changed dramatically (Lester, 2006). With this change, there is a need for secondary agricultural education students to be exposed to communications technology, specifically those used in agricultural communications. Learning is an active process where the learner uses sensory input and constructs meaning with the content based on previous learning and experiences (Hein, 1991). Due to secondary students' interest in digital technology, learning proper photography and videography skills may be an effective avenue for teaching agricultural communications in the classroom. Additionally, student literacy skills can be improved through writing and editing stories, specifically storyboards, which serve as a guide when shooting video. However, the integration of agricultural communications has not moved into the agricultural education classroom. Therefore, the purpose of the program assessed by this study was to integrate agricultural communications into secondary agricultural education classrooms utilizing digital technologies.

## **Purpose Statement**

The purpose of this study was to assess student knowledge gained and retained throughout a visual communications curriculum (including photography, writing, and videography) and an experiential learning (mobile classroom) activity using pre-, post-, and delayed posttests, as well as a video content analysis. Also, student perceptions were analyzed to determine the enjoyment, practicality and overall interest of the curriculum and the experiential learning activity.

## **Research Questions**

This study was guided by the following research questions:

1. Does student knowledge increase in competency areas associated with photography, writing, and videography [visual communications] curriculum throughout the program?
2. Does student achievement, specifically measured in knowledge gained, vary throughout socioeconomically different schools from time before exposure to the curriculum to the completion of the experiential learning activity?
3. Do students perceive the visual communications curriculum as enjoyable, valuable, and/or practical?
4. Are skills taught through the objectives of the visual communications curriculum visible in student video projects?

## **Hypotheses**

Based on the research questions, the following hypotheses were formulated:

H<sub>01</sub>: In the sample, there will be no significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.



Ha<sub>1</sub>: In the sample, there will be a significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>2</sub>: In the sample, there will be no significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>2</sub>: In the sample, there will be a significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>3</sub>: In the sample, there will be no significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>3</sub>: In the sample, there will be a significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>4</sub>: In the sample, there will be no relationship between increased test scores of students and socioeconomic status of the school they attend.

Ha<sub>4</sub>: In the sample, there will be a relationship found between increased test scores and socioeconomic status of students.

### **Key Terms**

Photography: The first of three units covered in the visual communications curriculum. This unit consisted of three required lessons and one optional lesson. Lesson topics were basic parts and functions of a digital camera, photo composition, writing photo captions, as well as photo manipulation (optional). Photo manipulation was optional due to a lack of software in the

schools. Students were taught basic manipulation skills during the experiential learning activity day.

Student Perceptions: Opinions gathered from the students on the instructional units and video project using survey style (Likert scale) questions.

Title 1 School: Schools with at least 40% of enrolled children from low-income families. These schools are eligible to use Title I funds for school-wide programs designed to upgrade their entire educational programs to improve achievement for all students, particularly the lowest-achieving students (U.S Department of Education, 2011).

Videography: The third and final unit covered in the visual communications curriculum. There were four lessons in this unit. Topics included the techniques for using the video camera, the process of shooting a video, choosing a story, creating a storyboard, and proper interviewing skills.

Visual Communications Curriculum: An educational unit consisting of multiple areas of instruction prepared by the University of Arkansas Department of Agricultural and Extension Education which included lesson plans, PowerPoint presentations, and supporting educational materials for secondary agricultural science teachers covering photography, writing in agriculture, and videography.

Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture: Program funded through the USDA/NIFA through the Secondary Education, Two-Year Postsecondary Education, and Agriculture (SPECA) program which allowed visual communications curriculum to be created and a mobile classroom to be implemented in secondary agricultural courses in Arkansas.

Writing: The second of three units taught in the visual communications curriculum. Students were taught the basic components of journalistic writing and feature writing.

### **Assumptions**

The following assumptions were made prior to and during the completion of this study:

1. Subjects answered all questions to the best of their ability.
2. Subjects participating in this study were representative of the general student population in the state.
3. Teachers, who choose to participate in the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program, taught all units as outlined by the researchers.

### **Limitations**

The following limitations should be considered when reading or repeating this study:

1. A pre-experimental design (#2) -- modified one-group pretest-posttest-delayed posttest as outlined in Campbell and Stanley (1963) -- was used for this study.
2. Weaknesses outlined for this design include history, maturation, selection, and mortality.

The researcher strived to limit the impact of these internal sources of invalidity. The study was conducted over a short period of time in order to limit maturation. Students were selected based on course enrollment rather than on an individual basis. Because students were participating in this study through a high school course, mortality was limited.

3. Generalizations should not be made beyond the students assessed in this study. Results and conclusions of this study are specific to the sampled population as outlined in Chapter 3.

## **CHAPTER II: REVIEW OF THE LITERATURE**

### **Introduction**

This literature review focused on six contextual areas related to this study: (1) visual communications; (2) Vocational education with specific regard to agricultural education and communications; (3) experiential instructional methods; (4) constructivism; (5) learning evaluation; and (6) diffusion of innovations.

### **Conceptual Framework**

#### *Visual Communications*

Communication happens constantly in our everyday life and is defined as the process of understanding and sharing meaning (Pearson, 2000). Effective communication helps us solve problems (Pearson, 2000). Lester (2006) defines visual communications as any optically stimulating message that is understood by a viewer. A message is considered the ideas, thoughts and feelings that someone communicates in both a verbal and nonverbal way to a person or group (Pearson, 2000).

Digital natives (those born after 1980) are “not engaging with news and information in the same way as it has historically been offered by these industries” (Palfrey & Gasser, 2008, p. 244). In *The Global Achievement Gap*, Tony Wagner discusses a need for teachers to teach subjects in a broader context. “Young people need to analyze and interpret new media; they need to produce and create, and they need to understand the ethical implications of their work and the new technologies” (Wagner, 2008, p. 189). The World Wide Web, videography, digital photography as well as other media are used in the most basic agricultural professions or tasks. Visual technologies have been used to assist agriculture with effectively communicating specific topics and processes to its publics. Images used to communicate in the agriculture industry are

essential to developing an understanding and can be read, construed, and used in different ways and multi-functions, like words (Weber, 2006).

Through visual communications, agricultural communicators generate meaning in a situation and transmit it to multiple individuals. “Visual images are very powerful in their occupation of the publics’ time and the shaping of how we process our surrounding environments” (Sadler-Trainor, 2005, p. 9). Use of images can have a more lasting impact than words alone (Lester, 1995). Universities offering agricultural programs have long had traditional classes which offer skills needed in order to sustain land, teach agriculture, and preserve the food and fiber industry. However, with the growing technology of our times and as the general public becomes further removed from agriculture, communications becomes ever critical to the promotion of agriculture (Bailey-Evans, 1994).

Palfrey and Gasser (2008) also stated that technology should be a part of the “every-day curricula in schools” (p. 247) where appropriate.

The emerging area of digital media and learning is not just the study of how digital tools can enhance learning. It is, rather, the study of how digital tools and new forms of convergent media, production, and participation, as well as powerful forms of social organization and complexity in popular culture, can teach us how to enhance learning in and out of school and how to transform society and the global world as well (Gee, 2010, p. 14).

#### *Agricultural Education and Agricultural Communications*

The Vocational Education Act of 1963 defines vocational education as courses used for the preparation of students for paid or unpaid employment (Hayward, 1993). Additionally, the act recognizes agricultural education courses as preparing individuals for college studies. This preparation for the workforce can be achieved through modified teaching methods that include reflective learning and hands-on engagement. In *Born Digital*, Palfrey and Gasser (2008) stated

that learning environments “where students are doing applied work, research and writing, and problem solving are obvious places to seek integration” (p. 247) of digital technologies.

Vocational education is an open-door for students to learn how to use and apply technologies directly to a career, or to open the doors for students to see a possible career and seek higher education. Agricultural communications curriculum offers an opportunity for students to develop communications skills used by agricultural communicators.

“Vocational agriculture curriculum has failed to keep up with modern agriculture” (National Research Council, 1988, p. 31). In 2010, there were 308,745,538 people living in the United States and over 80% of that population lived in urban, non-farm areas (USDA, 2010). Therefore, there is a need to tailor the agricultural curriculum to the non-farm student. However, currently most agricultural education courses still focus on the on farm production processes and technologies. While this information is crucial for basic operational understanding, it is not the information most students will be able to use in future careers for the industry.

“Visual images are very powerful in their occupation of the publics’ time and the shaping of how we process our surrounding environments” (Sadler-Trainor, 2005, p. 9). “Photographs and images on video are typically seen as direct copies of reality” (Messaris, 1997, p. VI). YouTube has capitalized on the ability for a short message to reach a large audience. According to website-monitoring.com (2010), the number of hits to videos on YouTube exceeds two-billion per day, and the number of advertisers has increased ten-fold in the past year.

In 1988, Phipps and Osborne listed skills in agricultural communications as one of the goals of agricultural education. In 2011, the National Research Agenda [NRA]: American Association for Agricultural Educations Research Priority Areas 2011-2015 (Doerfert, 2011) was developed and the document outlines critical components of agricultural education and

communications. There are six priority areas defined in the NRA. Incorporating agricultural communications technologies and curriculum into secondary schools can be tied to each of the identified priorities but priority number five outlines the need for efficient and effective agricultural education programs. In order to obtain effective programs, curriculum must be updated and changed to meet present needs.

Agricultural communications courses have existed in postsecondary education since 1905 (Boone, Meisenbach, & Tucker, 2002). However, today there are few states that have outlined agricultural communications curriculum for agricultural science programs in secondary education. In 2000, the National FFA Career Development Event (CDE) officially added agricultural communications as an event area. Oklahoma is one of the only states that currently maintains curriculum to support the agricultural communications CDE contest. The curriculum outlined for Oklahoma agricultural sciences noted that “communications in agriculture is designed to introduce students to topics related to promoting agriculture through a variety of media sources” (Oklahoma Curriculum and Instructional Media Center, 2010, p. 5). Since the incorporation of the agricultural communications CDE and classroom handbook, Arkansas has yet to develop an educational framework in agricultural communications to teach students about technologies and careers associated with this contextual area.

The United States Department of Education (US DOE) (1996) defined *technology literacy* as "computer skills and the ability to use computers and other technology to improve learning, productivity, and performance" (§ 2). In a study conducted by faculty and staff at the University of Arkansas Department of Agricultural and Extension Education, Arkansas agricultural science teachers were surveyed regarding how they perceived students' needs for training in electronic communication and technology for secondary students. Hunt, Edgar,

Edgar, Pennington, McGuire, and Cox (2010) found that older agricultural science teacher's had little interest in teaching technology in their courses, yet they rated student's literacy in technology as moderate to proficient.

Since the 1990s, agricultural communications has evolved into a highly competitive industry requiring knowledge of business practices and editorial skills as well as farming (Burnett & Tucker, 2001). The following competencies were outlined through a national Delphi study of high school students with specific focus in agricultural communications by Akers et al. (2001). One hundred percent of the respondents surveyed agreed that students should be able to identify careers available in agricultural communications. Competencies with 90-99% level of agreement included (Akers et al., 2001)

- Effectively interview a person
- Work in a team activity
- Work under pressure
- Identify the importance of correctly reporting the facts
- Give an effective interview
- Properly use a digital camera
- Demonstrate different methods of communication
- Demonstrate the ability to cite sources
- Write a news story
- Accurately proofread a document
- Seek, gather and synthesize information
- Properly use a video camera
- Write a feature story
- Write a caption for photos
- Perform basic word processing
- Utilize desktop publishing technique
- Determine whether a topic would be best covered in a news article or feature article.
- Identify bias in media stories
- Identify different audiences
- Write for broadcast
- Effectively edit a story
- Identify strategies to improve communication
- Target different audiences
- Develop a multimedia presentation

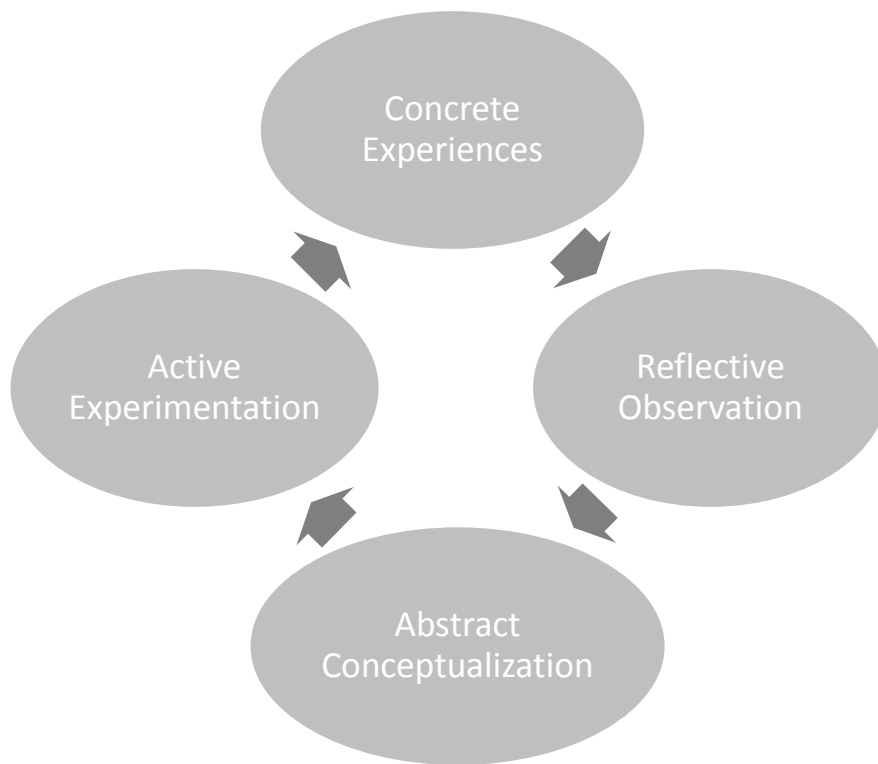
### **Theoretical Framework**

Supported by the concept of experiential learning this study adhered to a theoretical foundation as outlined in the following framework. The theoretical underpinnings of this research were guided by work of Kolb, Dewey, Lewin, and Piaget.

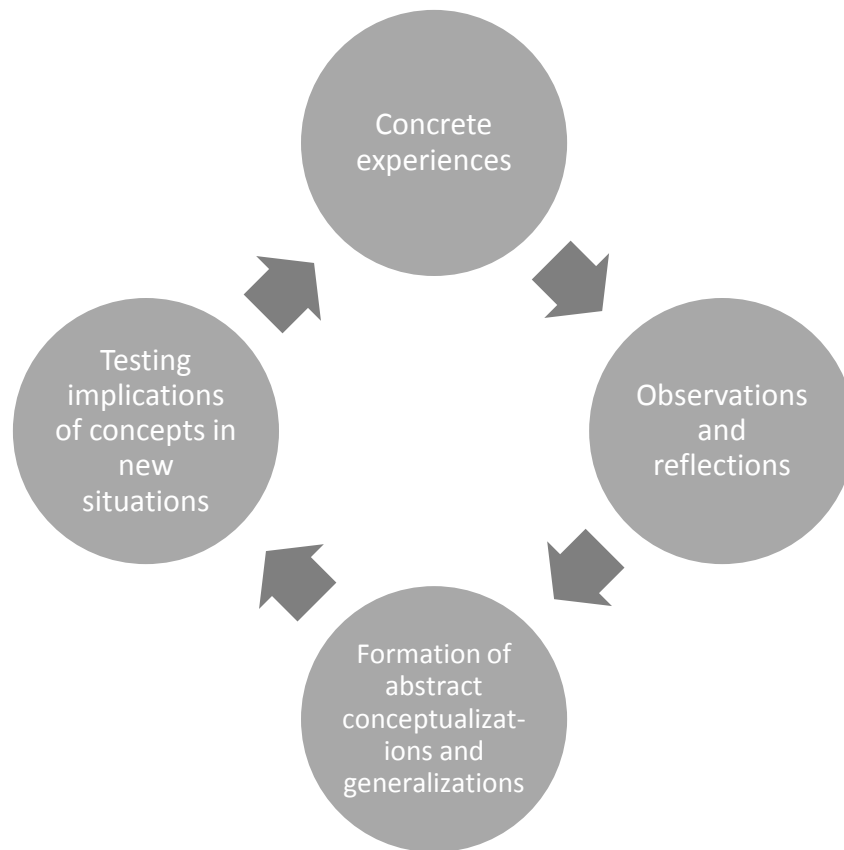


## *Experiential Learning*

Kolb (1984) proposes a theory of experiential learning that involves four principal stages: concrete experiences (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). Experiential learning is titled in a way to tie in works from Dewey, Lewin, and Piaget in an effort to emphasize the central role experience plays in the learning process (Kolb, 1984). The Dewey model of learning and Lewin model are similar. Lewin described learning in a four stage cycle much like what is seen in Kolb's model (Kolb, 1984) as outlined in Figure 2-1. Similarities can be seen by comparing Kolb's model in Figure 2-1 to Lewin's model identified in Figure 2-2.



*Figure 2-1. Kolb's (1984) Theory of Experiential Learning*



*Figure 2-2. Lewin's Model of Experiential Learning (Kolb, 1984)*

Lewin outlined two aspects of learning that were “noteworthy”, first is an emphasis on the here and now and second is that action research and laboratory training are based on feedback (Kolb, 1984). Lewin believed that feedback was the element that kept the learning process continuous. While similar to Lewin, John Dewey, also known as the father of agricultural education, was more specific about the feedback process by “describing how learning transforms the impulses, feelings, and desires of concrete experiences into higher-order purposeful action” (Kolb, 1984, p. 22). Dewey (1916) in *Democracy and Education* noted that experience was better than theory. Later in *Experience and Education* (1938), Dewey stated:

Experiences in order to be educative must lead out into an expanding world of subject-matter, a subject-matter of facts or information and of ideas. This condition is satisfied only as the

educator views teaching and learning as a continuous process of reconstruction of experience (p. 87).

Piaget relied heavily on cognitive development throughout stages to describe the learning process. Throughout each stage, learning occurs in different ways as well as at a different pace. Piaget suggests that experiences push students to new levels of operation (Woolfolk, 2010). By adolescence (middle school to high school age) students are utilizing more active orientation, and through careful process begin to experimentally test theories (Kolb, 1984). Kolb's desire was to integrate all of their works, not to produce an entirely new theory. Kolb defines learning as the "process whereby knowledge is created through the transformation of experiences" (Kolb, 1984, p. 38).

The Center for Excellence in Teaching (CET) at the University of Southern California (USC) describes Problem Based Learning (PBL) as "particularly effective in helping students develop the ability to apply concepts and ideas to practical experience and vice versa" (USC-CET, 2006, p. 1). In a paper by Savery (1994), *What is Problem Based Learning?*, problem based learning is defined as a process in which real world problems are used to help and motivate students to identify, apply, collaborate and communicate their knowledge effectively. Collaboration allows students to have ownership in their learning through participation. "Learners are expected to understand the applications they are learning" (Edgar, 2011, p. 13) and should be able to do more than simply act on memorization. These teaching methods allow students to reach the higher tiers in Bloom's Taxonomy (1956) application, analysis, synthesis, and evaluation. Roy, Richards, and Pisan (2002) acknowledge that implementing experiences and problem based learning takes time and effort but that the reward outweighs the cost in the

end. Roy et al. (2002) concluded that the benefits to students are that they will be encouraged to solve problems for themselves, and they are able to gain a deeper understanding of real problems as well as solutions. All of the learning theories mentioned can be achieved through the constructivist approach.

### *Constructivism*

Constructivism is a term used to represent a collection of theories, including generative learning (Wittrock, 1990), discovery learning (Bruner, 1961), and situated learning (Brown, Collins, & Duguid, 1989). Constructivism is the “learning by doing” theory in which agricultural science programs can base many of their lessons on. Agricultural communications technology does differ from the stereotypical agricultural science coursework which typically is limited to plants, animals, and mechanics. As agriculture diversifies, a need to communicate the messages of producers to consumers has increased. Agricultural communications is still a small field of study due to many reasons, one of which is limited secondary student knowledge of the career field. By incorporating agricultural communications curriculum into secondary coursework students gain an understanding of opportunities in the field by learning and applying skills needed in the field. The theory of constructivism suggests that individuals actively construct knowledge by working to solve realistic problems, usually in collaboration with other learners (Duffy, Lowyck, & Jonasses, 1993).

In many subject areas, students do not get the opportunity to apply what they learn, which adds value to the lesson. In order for students to stay interested they need to see value in each lesson taught. “Traditional instruction often leads students to believe they are not interested in particular subject areas” (Brooks & Brooks, 1999, p. 16). By getting out of their chairs, students

engage in the learning experience and gain a deeper understanding of the task at hand.

According to Brooks and Brooks (1999), “deep understanding is the goal” (p. 16).

Educational settings that encourage the active construction of meaning have several characteristics (Brooks & Brooks, 1999, pp. 21-22):

- They free students from the dreariness of fact driven curriculums and allow them to focus on large ideas.
- They place in students’ hands the exhilarating power to follow trails of interest, to make connections, to reformulate ideas, and to reach unique conclusions.
- They share with students the important message that the world is a complex place in which multiple perspectives exist and truth is often a matter of interpretations.
- They acknowledge that learning, and the process of learning, are, at best, elusive and messy endeavors that are not easily managed.

### *Learning Evaluation*

Talbert, Vaughn, Croom, and Lee (2007) defined evaluation as “a process to analyze educational effectiveness (student achievement) by using measurement tools” (p. 354).

Evaluation can determine student achievement on an individual or group level, help educators determine deficiencies and academic problems, determine effectiveness of curriculum, and also evaluate educational progress (Talbert et al., 2007). Just as there are many reasons for evaluation, there are many ways evaluation can be conducted.

Evaluation should be driven based on objectives. Two types of evaluation exist, formative and summative. Formative evaluation determines a starting point while summative determines how well students achieved. Formative evaluation can help instructors develop appropriate objectives for curriculum. “Well written objectives describe the learning expected of

students” and “well designed evaluation results describe whether the objectives were reached” (Newcomb, McCracken, Warmbrod, & Whittington, 2004, p. 330). Objectives must be clearly defined and set forth by the teacher as a guide not only for instruction but for outlining evaluation as well.

Blooms taxonomy is often used to formulate objectives using the ABCD method. For this method, “A” stands for audience, “B” stands for behavior, “C” stands for condition, and “D” stands for degree. The audience is whoever is being taught. In secondary education, this would almost always refer to the student. The behavior defines what is expected of the student. The behavior could be recite a message, identify characteristics, or complete a project. The condition defines if students should complete the task alone or with others or could also be using their book/notes or completing without outside materials. Lastly, the degree defines the level at which students should perform. A percentage is usually attached to the degree noting the accuracy. An example of a complete objective would be, “Students will be able to recite the FFA Creed from memory with 90% accuracy.” This objective identifies the students as the audience, reciting the creed as the behavior, from memory as the condition, and with 90% accuracy as the degree. Once objectives are clearly defined, evaluation can be developed.

Kirkpatrick (1994) defined four levels of evaluation: (1) reaction, (2) learning, (3) behavior, and (4) results. Reaction ultimately measures the students’/participants’ reaction to and perception of the training or curriculum. Learning is an actual measurement of a change in knowledge or skill level. Behavior assesses whether or not a change in behavior occurred as a result of the training or curriculum. Lastly, results assess the overall impact of the program whether it is a new curriculum unit or a training program. Figure 2-3 illustrates Kirkpatrick’s four levels of evaluation and how they work together.

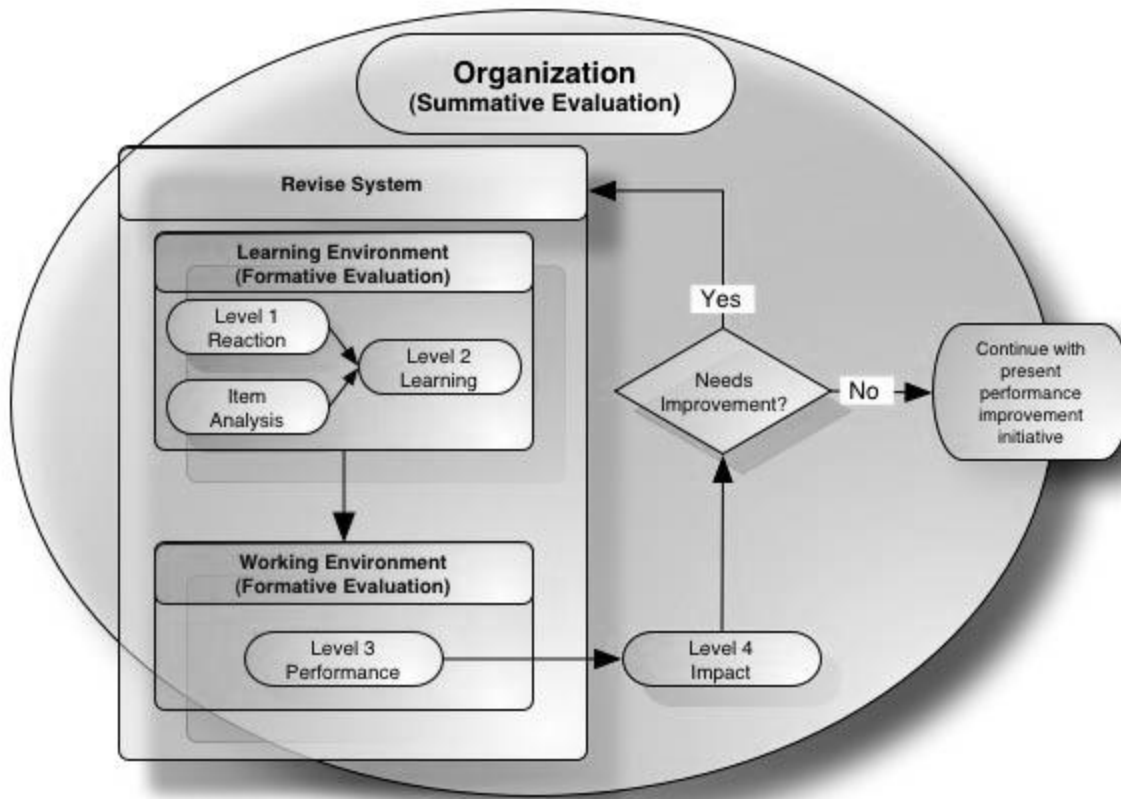


Figure 2-3. Flow chart of Kirkpatrick's Learning Evaluation Model

Evaluating at all levels of Kirkpatrick's (1994) Learning Evaluation Model allows for instructors to continually make changes to curriculum and evaluation instruments. The feedback from participants is a valuable source in determining the direction of training or education programs. For teachers, improvement of a new program using this model could aid in convincing their peers to also participate (diffusion of innovations).

#### *Diffusion of Innovations*

The diffusion of innovations can be, and usually is a very long intricate process. Everett M. Rogers (2003) developed a widely used model for following a new product through the diffusion process. Rogers (2003) defined diffusion as "the process in which an innovation is

communicated through certain channels over time among the members of a social system (p. 5). Agricultural education programs across the country teach many of the same topics and concepts. As stated earlier in this chapter, there is a push for new curriculum to be incorporated meeting the needs of the industry as it is today, rather than how it has operated in the past. As new curriculum is developed, it must go through the same processes new technology and other innovations go through to be accepted by teachers.

There are five stages of the innovation-decision process (Rogers, 2003):

1. Knowledge: Knowledge occurs when an individual is first exposed to a new innovation and learns how it functions.
2. Persuasion: Persuasion is when an individual develops an attitude (either favorable or unfavorable) towards the innovation.
3. Decision: The individual now makes a choice whether to adopt or reject the innovation.
4. Implementation: If the individual chose to adopt the innovation, they will now put it to use.
5. Confirmation: After putting the innovation to use, the individual will seek reinforcement of the decision they made. At this point, they want to ensure they were correct in deciding to adopt.

Knowledge of new curriculum can be achieved by developers attending events where early adopters will be as well as setting up meetings with these individuals. Early adopters are the individuals willing to step outside the norm and try something new before it has been proven beneficial. Once early adopters complete the five stages of the innovation-decision process, they help spread the curriculum throughout a social system. In the case of a curriculum unit, the social



system would be teachers of the same content. “The early adopter is respected by his or her peers and is the embodiment of successful, discrete use of new ideas” (Rogers, 2003, p. 283).

### **Summary**

Visual communications has a place in agricultural education. Constructive curriculum which engage students in learning is useful in students’ ability to learn the curriculum. Students are already utilizing digital cameras, video cameras, writing in journals, and documenting their lives through social media outlets. Agricultural communications skills and competencies can be taught and refined in order to give students marketable competencies for careers. Few schools have implemented such curriculum thus far. By incorporating literacy and visual communications into agricultural science courses, students will be better prepared for future careers in the agricultural industry or at least be better consumers of agriculturally related news. After review of the literature, it is apparent that agricultural communication curriculum is non-existent even though the National FFA Organization has outlined a career development event and the National Research Agenda has outlined its importance. Throughout the incorporation of the new curriculum outlined by the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program, faculty and staff can utilize Kirkpatrick’s (1994) Learning Evaluation Model (reaction, learning, behavior, and results) to ensure the quality of the program and know how to proceed throughout the diffusion process as outlined by Rogers (2003).

## **CHAPTER III: METHODOLOGY**

### **Purpose Statement**

The purpose of this study was to determine if there is a significant difference ( $p \leq .05$ ) in knowledge increase of students enrolled in agricultural science courses which have implemented agricultural communications curriculum with an experiential learning day in which students implement skills taught to compose three to five minute videos promoting or advertising agriculture. In addition, this study looks at students' perceptions of the curriculum and the experiential learning process associated with the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program.

This study was guided by the following research questions:

1. Does student knowledge increase in competency areas associated with photography, writing, and videography [visual communications] curriculum throughout the program?
2. Does student achievement, specifically measured in knowledge gained, vary throughout socioeconomically different schools from time before exposure to the curriculum to the completion of the experiential learning activity?
3. Do students perceive the visual communications curriculum as enjoyable, valuable, and/or practical?
4. Are skills taught through the objectives of the visual communications curriculum visible in student video projects?

### **Hypotheses**

Based on the research questions, the following hypotheses were formulated:

Ho<sub>1</sub>: In the sample, there will be no significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>1</sub>: In the sample, there will be a significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>2</sub>: In the sample, there will be no significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>2</sub>: In the sample, there will be a significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>3</sub>: In the sample, there will be no significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>3</sub>: In the sample, there will be a significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>4</sub>: In the sample, there will be no relationship between increased test scores of students and socioeconomic status of the school they attend.

Ha<sub>4</sub>: In the sample, there will be a relationship found between increased test scores and socioeconomic status of students.

## Design of the Study

A pre-experimental design (#2) modified one-group pretest-posttest-delayed posttest from Campbell and Stanley (1963) was used for this study. A diagram of the pre-experimental design can be seen in Figure 3-1.

Figure 3-1

*Modified One Group Pretest-Posttest-Delayed Posttest*

Pretest	Unit 1	Posttest	Unit 2	Posttest	Unit 3	Posttest	Mobile Classroom	Delayed Posttest
O	X <sub>1</sub>	O <sub>1</sub>	X <sub>2</sub>	O <sub>2</sub>	X <sub>3</sub>	O <sub>3</sub>	X <sub>4</sub>	O <sub>4</sub>

The subjects of this study were high school students enrolled in agricultural science courses. Prior to the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program being funded five secondary schools expressed an interest in participating as pilot schools for the project. However, during piloting the program in the fall 2010 semester, one school dropped from the program due to lack of time to implement the curriculum. Therefore the following four secondary schools participated in the program: Prairie Grove, Mena, Conway, and Greenbrier. Completed instruments were collected from all schools except Mena. This school failed to complete all the pre- and posttests for the study.

After the pilot period was complete, secondary schools volunteered to participate in the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program. Schools were targeted for participation through emails informing them of the project and in-person at the following events: (a) Arkansas Agricultural Teachers Conference, (b) State CDE contest, and the Northwest District Teacher meeting, (c) Northeast District In-service, and (d) Farm Bureau Agricultural Career Day in Clinton, Arkansas. Six secondary schools participated in the spring 2011 Visual Communications on the Road in

Arkansas: Creative Photo and Video Projects to Promote Agriculture program: Harrisburg High School, Weiner High School, Bismarck High School, Flippin High School, Springdale Southwest Junior High, and Conway West High School. In the fall 2011 semester the following seven secondary schools participated in the program: Hackett High School, Morrilton High School, Prairie Grove High School, Searcy High School, Siloam Springs Middle School, Taylor High School, and Weiner High School.

Because Arkansas frameworks do not outline a course for agricultural communications, teachers incorporated the curriculum into various courses, including (a) introduction to agricultural sciences, (b) leadership and communications, and (c) aquaculture. Of the participating schools, a total of 11 completed the study.

Students were given a pretest (Appendix D) before being introduced to any of the curriculum to measure their knowledge level prior to any curriculum being administered. The pretest consisted of 25 questions regarding parts and functions of digital single lens reflex (SLR) cameras, characteristics of feature and news writing, writing ethics, functions of digital video cameras, and techniques for capturing both still and video images. After completing the pretest, the agricultural science teacher began teaching the units of instruction (visual communications curriculum).

Teachers accessed the curriculum from the Department of Agricultural and Extension Education's (AEED) website (<http://aeed.uark.edu/5422.htm>). The teacher was responsible for teaching photography, writing, and videography as outlined in the curriculum unit. Faculty and staff from the university completed the lesson on careers during the day visit with the mobile classroom. Each unit consisted of a lesson plan, instructional PowerPoint's, handouts,

worksheets, and additional supporting material. Students were given a posttest (Appendix D) after each unit covering basic objectives from the unit. The test was structured like the pretest.

Throughout each unit, information was given that would aid in the development of a student video project which would be put together during the experiential learning activity with the mobile classroom. The units were taught in the following order (see Appendix C for Agricultural Communications Lesson Plans): 1) Photography, 2) Writing, and 3) Videography.

In addition to lecture materials, extra resources and information were provided for teachers to complete activities and projects. During the writing portion of this curriculum, students organized information for a story which they would develop during the mobile classroom day visit. Teachers sent the storyboards to faculty and staff at the University to ensure that stories would be appropriate and could be produced in the time allotted. All skills taught throughout the three visual communications curriculum units were required to successfully complete the video projects associated with the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program.

After completion of all units, the mobile classroom associated with the project spent one full day at each participating school. During this visit, students participated in an overview of the visual communications curriculum learned prior to the mobile classroom visit and were taught about career opportunities in agricultural communications. Students then spent the remainder of the day taking photographs, capturing video and completing the story, through video, they had previously outlined. Students were responsible for interviewing experts and narrating their stories. After capturing images and videos, students worked on laptops, with Adobe Photoshop and Premier Pro housed in the mobile classroom, to edit their raw photos and

video, combining the visual formats and adding titles, music and text. Students were tested again at the end of the day after participating in the experiential learning activity (Appendix E).

Upon completion and rendering of the videos the students' projects were posted to YouTube. This occurred approximately 48 to 96 hours after the completion of the mobile classroom project. This allowed time for faculty and staff at the AEED to ensure the videos were accurate and contained credits.

In addition to knowledge level questions on the testing instruments, there were a series of perception questions regarding the students' interest, enjoyment, and practicality of each curriculum unit, the curriculum as a set, and the mobile classroom experience (Appendix D). Student attitudes toward each subject matter area were measured using modified versions of the *Attitudes Toward Any School Subject* instrument (Purdue Research Foundation, 1986). Twenty questions were asked on a seven point Likert-type scale: 1 = strongly disagree and 7 = strongly agree. Any negatively worded questions were reverse coded for analysis.

A video content analysis was developed by the researcher in order to evaluate the student's ability to apply competencies and objectives of the curriculum. Each video project completed was evaluated based on this content analysis. Areas from the photography unit were assessed by counting the number of photos used and determining the element(s) of composition (framing, centering/symmetry, leading lines, rule of thirds, simplicity, and/or subject background relationship) applied, if photos were or should have been manipulated (edited using software), and if captions for photos were written correctly. For the writing unit, videos were assessed based on the viewer (coder's) ability to identify the "who", "what", "where", "when", "why" and "how" elements of the story being told. For the final unit, videography, videos were assessed based on video capturing techniques, included the use of a tripod and lighting, as well as the

interviewing techniques, and overall quality of the video in relation to the story being told. A coding form (Appendix F) was developed based on the objectives of the curriculum units. The content analysis was completed by two students in the Agricultural and Extension Education Department at the University of Arkansas. Before coding, the researcher led the coders through the curriculum teaching the concepts outlined by the curriculum. The researcher and coders then watched videos together, completed analysis individually then compared each analysis. Discrepancies were resolved by reviewing the video and agreeing on content before moving on.

### **Sample**

The population of this study was students enrolled in agricultural sciences courses in Arkansas. The sample testing group was selected based on teacher willingness to incorporate the curriculum into one or more of their agricultural science courses. Teachers were able to meet with faculty and staff from the University of Arkansas to learn more about the study before agreeing to participate. Teachers were given access to the curriculum via the Department of Agricultural and Extension Educations website. Teachers from 13 schools participated during the spring and fall 2011 semesters. Due to incomplete instruments, data from two participating schools were not used.

### **Validity**

Campbell and Stanley (1963) define history as the events that take place between measurements. The researcher tested students after each individual unit to control for history invalidity. Each teacher was given access to the instrument packet, which included the pretest, posttest for each curriculum area and corresponding perception instrument (Appendix D). Teachers were given specific instructions for when to have students complete each instrument. The final instrument was given at the end of the day during the mobile classroom visit. Data



were collected over a short period of time to control for maturation, the change in subjects over time (Campbell & Stanley, 1963). From the time students took the pretest to the time of the final posttest, was approximately two weeks. The delayed posttest was administered within two weeks of the final posttest.

### Pilot Test

A researcher created instrument to assess knowledge level retention and perceptions of the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program. Instruments were created by the researcher and were based on the review of literature and curriculum units and therefore maintained face validity. Content validity was maintained through a group of expert reviews that consisted of agricultural education and communications faculty and staff at the University of Arkansas. This study was pilot tested in four Arkansas high school agricultural science programs (Conway, Greenbrier, Mena, and Prairie Grove) during the Fall 2010 semester. The researcher adjusted instruments and curriculum based on results of the pilot tests. Statistical analyses were run on the data collected from the pilot study of this project. Paired sample t-tests were run on the pre- and delayed posttest scores based on pilot data findings (Table 3-2 displays the results of this analysis).

Table 3-1

*Paired Sample t-test Results from the Pretest and Delayed Posttest of the Pilot Study*

School	Photography			Writing			Videography			Overall		
	<i>t</i>	<i>df</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>T</i>	<i>df</i>	<i>P</i>	<i>t</i>	<i>df</i>	<i>p</i>
Pilot 1	2.61	10	.03*	3.63	10	.01*	2.54	10	.03*	4.21	10	.00*
Pilot 2	.00	5	1.00	1.17	5	.30	.83	5	.44	.10	5	.92
Pilot 3	7.25	10	.00*	2.04	10	.07	5.58	10	.00*	7.70	10	.00*
All Groups	4.64	27	.00*	2.52	27	.02*	4.89	27	.00*	5.56	27	.00*

\**t* value is significant at the .05 level

Curriculum units (photography, writing, and videography) and the mobile classroom (experiential learning) activities were adjusted and improved to strengthen program impact based on the results of the pilot study. During the pilot, teachers were asked to have participant's complete instruments before beginning the curriculum, after each curriculum unit, and then program facilitators administered the final instrument after the mobile classroom visit. Upon completion of the pilot project, it was found that teachers were not having participants complete the post curriculum instruments. After this analysis, a more detailed protocol was formed for participating teachers to follow in order to increase the number of instruments completed.

Descriptive statistics were analyzed on the student perceptions of the pilot study. The results for perceptions of the curriculum can be seen in Table 3-3 and results for the mobile classroom experience can be seen in Table 3-4.

Table 3-2

*Perceptions of Students Participating in the Pilot Program Regarding the Curriculum Series*

School	n	Enjoyment		Practicality		Interest	
		M	SD	M	SD	M	SD
Pilot 1	11	5.80	.85	5.56	1.17	5.54	1.12
Pilot 2	6	5.47	.53	5.52	.87	5.34	.41
Pilot 3	13	5.56	.90	5.55	1.23	5.45	.92
Overall	30	5.64	.79	5.57	1.08	5.49	.88

Table 3-3

*Perceptions of Students Participating in the Pilot Program Regarding the Mobile Classroom*

School	n	Enjoyment		Practicality		Interest	
		M	SD	M	SD	M	SD
Pilot 1	11	6.03	.64	5.76	1.01	6.21	.59
Pilot 2	6	5.92	.52	5.95	.48	6.24	.39
Pilot 3	13	4.79	.86	5.26	.91	5.32	.64
Overall	30	5.50	.91	5.64	.91	5.88	.72

Upon completion of the pilot and analysis of this data, additional instruments assessing student perceptions were added to the study. These instruments were developed based on the same design as the instruments already in place but were worded to be specific for each content area. Once these were added, an instrument for perceptions would be completed for photography, writing, videography, the curriculum unit as a whole and the mobile classroom experience.

### **Reliability**

Cronbach’s Alpha was used to test instrument reliability. Each knowledge instrument (pretest, posttest, and delayed posttest) asked the same questions in the same order. The instrument resulted in a Cronbach’s Alpha value of .74.

In addition to the knowledge instrument, reliability of each perception instrument was tested. Students completed five perception instruments each having questions regarding the students’ enjoyment, interest in, and practical use of the topic. Instrument reliability ranged from Cronbach’s Alpha of .75 to .88. Table 3-5 shows each instrument and the corresponding reliability.

Table 3-4

*Reliability Coefficients for Perception Instruments Used in this Study*

Perception Instrument	Cronbach’s Alpha		
	Enjoyment	Interest	Practicality
Photography	.85	.82	.84
Writing	.82	.83	.88
Videography	.86	.85	.85
Curriculum	.81	.75	.82
Mobile Classroom	.78	.83	.78

### **Conditions of Testing**

Pre- and posttest data were collected during the normal course time for the students participating. Delayed posttest data were collected upon completion of the video project at the end of the mobile classroom day visit. The pretest was administered prior to curriculum administration. After the first unit (photography) was completed by the teacher the unit curriculum posttest was given. This was repeated in the second (writing) and third (videography) curriculum units. Also, upon completion of the day visit from the mobile classroom, a cumulative test was given measuring the students' knowledge over all areas of the curriculum. This cumulative instrument was structured similar to the pre- and posttests.

### **Data Collection Procedures**

All students participating were required to provide a signature of a parent or guardian allowing consent for participation in this study. Upon completion of the pretest, students were assigned an alpha-numeric code to ensure confidentiality. This code was used to match all instrumentation from individuals. Any individual who did not complete all instruments was not used as part of the study but still allowed to participate in the experiential learning activity. The visit from the mobile classroom began with a lesson on agricultural communications careers. Then, students were given a brief review of the curriculum. Students used flash cards to quiz each other over unit content. Students then worked in groups to identify photos and video footage needed to complete their storyboards and create a three to five minute video to promote agriculture. Students also identified interview questions and narrative script for the video project. After organizing their thoughts, students were given video cameras and digital SLR cameras to capture any images and footage needed. Students had an hour and a half to complete this process. Once all images were captured, students were able to load them onto the computer

and begin editing photos and combining them with video footage. Students had three hours to complete the tasks on the computer. University of Arkansas faculty and staff rendered the videos and uploaded them to the projects YouTube channel upon return to campus.

### **Analysis of Data**

Data were analyzed using SAS® 9.2 and SPSS 17 statistical packages. Inferential statistics were used to analyze difference in test scores using a repeated measures analysis of variance. A dependent t-test was used to analyze differences in pre- and delayed posttest scores for describing significance at difference schools and a correlation was run comparing them to socioeconomic status. *A priori* was set at .05. Descriptive statistics were used for students' perceptions of the curriculum and experiential learning process.

## **CHAPTER IV: RESULTS AND FINDINGS**

This study was guided by the following research questions:

1. Does student knowledge increase in competency areas associated with photography, writing, and videography [visual communications] curriculum throughout the program?
2. Does student achievement, specifically measured in knowledge gained, vary throughout socioeconomically different schools from time before exposure to the curriculum to the completion of the experiential learning activity?
3. Do students perceive the visual communications curriculum as enjoyable, valuable, and/or practical?
4. Are skills taught through the objectives of the visual communications curriculum visible in student video projects?

### **Hypotheses**

Based on the research questions, the following hypotheses were formulated:

Ho<sub>1</sub>: In the sample, there will be no significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>1</sub>: In the sample, there will be a significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>2</sub>: In the sample, there will be no significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>2</sub>: In the sample, there will be a significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>3</sub>: In the sample, there will be no significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>3</sub>: In the sample, there will be a significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>4</sub>: In the sample, there will be no relationship between increased test scores of students and socioeconomic status of the school they attend.

Ha<sub>4</sub>: In the sample, there will be a relationship found between increased test scores and socioeconomic status of students.

### **Sample Demographics**

General information about each of the schools that participated in this study regarding location, classification, ethnic distribution, and student’s eligible for free/reduced lunches was obtained from the National Center for Education Statistic’s online database (<http://nces.ed.gov/>).

Table 4-1 displays key demographics for each school that participated in the study.

Table 4-1

#### *Demographics of Schools Participating in the Visual Communications Program*

School	Location	Total	Gender Distribution		Ethnic	Free/Reduced Lunch Eligible	
			Male	Female		Free	Reduced
Conway West H.S	North Central	1277	635	642	66% White 26% Black 6% Hisp All other ≤5%	306	58

Table 4-1 (Continued)

*Demographics of Schools Participating in the Visual Communications Program*

School	Location	Total	Gender Distribution		Ethnic	Free/Reduced Lunch Eligible	
			Male	Female		Free	Reduced
Flippin H.S.	North	283 (9-12)	143	140	98% White All other groups ≤5%	123	37
Hackett H.S.	West	306 (7-12)	169	137	92% White All other groups ≤5%	112	19
Harrisburg H.S.	East	340 (9-12)	182	158	94% White All other groups ≤5%	337	0
Morrilton H.S.	North Central	698	341	357	71% White 24% Black All other groups ≤5%	289	52
Prairie Grove H.S.	Northwest	500 (9-12)	266	234	95% White All other groups ≤5%	141	48
Searcy H.S.	Central	1101 (9-12)	526	575	81% White 8% Black 6% Hispanic All other groups ≤5%	283	102
Siloam Springs M.S.	Northwest	926 (6-8)	473	453	67% White 22% Hispanic 7.5% American Indian All other groups ≤5%	359	106
Springdale SW Jr. High	Northwest	849 (5-9)	433	416	46% Hispanic 44% White 8% Asian/Pac All other groups ≤5%	447	77



Table 4-1 (Continued)

*Demographics of Schools Participating in the Visual Communications Program*

School	Location	Total	Gender Distribution		Ethnic	Free/Reduced Lunch Eligible	
			Male	Female		Free	Reduced
Taylor H.S	South	143	70	73	85% White 10% Black All other groups ≤5%	37	14
Weiner H.S	East	***	***	***	***	***	***

\*\*\*School information not available due to recent consolidation.  
Data retrieved from <http://nces.ed.gov/ccd/schoolsearch/index.asp>

Information regarding the participants’ gender, grade level, number of agricultural courses and geographic division (rural or urban) was gathered when students completed the delayed posttest instrument. Students participating in this study were 35.3% ( $n = 36$ ) female and 64.7% ( $n = 102$ ) male. Classification of students ranged from 7th through 12th grade. Students in the 7th and 8th grade represented 6.86% ( $n = 7$ ) of the participants in the program, 12.74% ( $n = 13$ ) were freshmen, 22.54% ( $n = 23$ ) were sophomores, 23.54% ( $n = 23$ ) were juniors, and 35.29% ( $n = 36$ ) were seniors.

**Results**

School names were previously reported for demographic purposes. Throughout the results section, school names have been removed for confidentiality reasons.

*Research Question One – Hypothesis One*

Null hypothesis one stated that there will be no difference in knowledge level of photography competencies from the time before exposure to the time after curriculum, to the time after students participate in the mobile classroom. The testing instruments had 10 questions worth 11 points for the photography unit. The students averaged about 44% on the pretest ( $M =$

4.85,  $SD = 1.34$ ), 60.5% on the posttest ( $M = 6.65$ ,  $SD = 2.07$ ), and 67.7% on the delayed posttest ( $M = 7.45$ ,  $SD = 1.12$ ). Mean test scores for each participating school can be found in Table 4-2. Test scores from the photography unit of all three tests were analyzed using a repeated measures analysis of variance. This analysis revealed a significant effect of curriculum on student test scores,  $F(2, 20) = 11.82$ ;  $p = .0004$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 8.86$ ;  $p = .0139$  and the delayed posttest scores  $F(1, 10) = 61.99$ ;  $p < .0001$ . Based on the contrast of pretest to posttest and pretest to delayed posttest, null hypothesis one was rejected and alternate hypothesis one was accepted. Cohen (1988) related an eta squared of .0090 as a “small effect”, .0588 relates to a Cohen “medium effect”, and .1379 to a Cohen (1988) “large effect”. For the pretest to posttest  $\eta^2 = .47$  (large), power = .28 and the pretest to delayed posttest  $\eta^2 = .86$  (large), power = .18. Contrast showed the posttest scores were not significantly different compared to the delayed posttest scores  $F(1, 10) = 1.51$ ;  $p = .2477$ . See Table 4-3 for the ANOVA summary.

Table 4-2

*Mean Test Scores from the Photography Unit*

School	Pretest		Posttest		Delayed Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	4.82	1.90	5.82	2.41	7.55	2.43
B	5.75	0.83	8.33	1.25	9.50	1.12
C	3.75	2.73	2.63	3.71	7.00	2.26
D	5.80	1.94	6.90	1.97	7.60	1.56
E	2.75	1.92	9.50	2.06	5.75	2.86
F	7.14	2.03	9.57	1.05	7.71	2.76
G	5.79	1.70	7.79	0.94	7.93	1.39
H	4.29	1.83	4.27	2.63	7.00	1.65
I	4.50	2.20	7.00	1.84	9.00	1.00
J	6.00	1.66	6.63	1.22	7.38	0.99
K	2.71	1.03	4.71	1.03	5.57	2.66
Overall	4.85	1.34	6.65	2.07	7.45	1.12

Table 4-3

*ANOVA Summary Table for Test Scores in Photography Unit using a Repeated Measures Design*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Subjects	10				
Within Subjects	22				
Treatment	2	39.25	19.63	11.82	.0004*
Residual	20	32.21	1.66		

Note: *n* of schools = 11

\*Significance was set *a priori* at the .05 level

### *Research Question One - Hypothesis Two*

Null hypothesis two stated that there will be no difference in knowledge level of writing competencies from the time before exposure to the time after curriculum, to the time after students participate in the mobile classroom. The testing instruments had five questions worth one point each for the writing unit. The students averaged about 12.8% on the pretest ( $M = .64$ ,  $SD = .52$ ), 43% on the posttest ( $M = 2.15$ ,  $SD = 1.05$ ), and 36.6% on the delayed posttest ( $M = 1.83$ ,  $SD = .61$ ). Mean test scores for each participating school can be found in Table 4-4. Test scores from the writing unit of all three tests were analyzed using a repeated measures analysis of variance. This analysis revealed a significant effect of curriculum on student test scores,  $F(2, 20) = 14.52$ ;  $p = .0001$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 25.37$ ;  $p = .0005$  and the delayed posttest scores  $F(1, 10) = 27.70$ ;  $p < .0004$ . For the pretest to posttest  $\eta^2 = .72$  (large), power = .22 and the pretest to delayed posttest  $\eta^2 = .73$  (large), power = .22 (Cohen, 1988). Contrast showed the posttest scores were not significantly different compared to the delayed posttest scores  $F(1, 10) = 0.87$ ;  $p = .3719$ . Based on the analysis of pretest to posttest and pretest to delayed posttest, null hypothesis two

was rejected and alternate hypothesis two was accepted. See Table 4-5 for the ANOVA summary.

Table 4-4

*Mean Test Scores from the Writing Unit*

School	Pretest		Posttest		Delayed Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	0.45	0.78	0.91	1.16	2.45	1.97
B	0.83	0.55	2.17	1.07	2.17	0.99
C	0.50	1.00	2.38	2.12	2.22	1.69
D	0.80	0.75	2.00	0.77	2.40	1.43
E	0.00	0.00	4.00	0.00	2.00	1.22
F	2.00	1.51	4.29	0.45	1.71	1.28
G	0.57	0.62	1.64	1.04	1.36	0.72
H	0.29	0.45	0.92	0.92	1.21	1.21
I	0.70	0.90	2.30	1.10	2.63	1.22
J	0.88	0.60	1.50	0.87	1.38	0.86
K	0.00	0.00	1.57	1.05	0.57	0.73
Overall	0.64	0.52	2.15	1.05	1.83	0.61

Table 4-5

*ANOVA Summary Table for Test Scores in Writing Unit using a Repeated Measures Design*

Source	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Subjects	10				
Within Subjects	22				
Treatment	2	13.98	6.99	14.52	.0001*
Residual	20	9.63	0.48		

Note: *n* of schools = 11

\*Significance was set *a priori* at the .05 level

*Research Question One- Hypothesis Three*

Null hypothesis three stated that there will be no difference in knowledge level of videography competencies from the time before exposure to the time after curriculum, to the time after students participate in the mobile classroom. The testing instruments had 10 questions

worth 11 points for the videography unit. The students averaged about 43% on the pretest ( $M = 3.93$ ,  $SD = .86$ ), 46.5% on the posttest ( $M = 5.12$ ,  $SD = 1.06$ ), and 48.3% on the delayed posttest ( $M = 5.31$ ,  $SD = 1.35$ ). Mean test scores for each participating school can be found in Table 4-6. Test scores from the videography unit of all three tests were analyzed using a repeated measures analysis of variance. This analysis revealed a significant effect of curriculum on test scores,  $F(2, 20) = 8.39$ ;  $p = .0023$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 17.16$ ;  $p = .0020$ , and the delayed posttest scores  $F(1, 10) = 8.60$ ;  $p = .0150$ . For the pretest to posttest  $\eta^2 = .63$  (large), power = .24 and the pretest to delayed posttest  $\eta^2 = .46$  (large) power = .57 (Cohen, 1988). Contrast of the posttest to delayed posttest revealed no significant difference,  $F(1, 10) = .36$ ;  $p = .5611$ . Based on the contrast analysis of the pretest to posttest and pretest to delayed posttest, null hypothesis three was rejected and alternate hypothesis three was accepted. See Table 4-7 for the ANOVA summary.

Table 4-6

*Mean Test Scores for the Videography Unit*

School	Pretest		Posttest		Delayed Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	4.45	1.83	4.91	2.11	6.18	3.30
B	4.17	1.14	5.27	1.60	4.83	1.77
C	2.88	2.57	5.00	3.24	6.56	1.34
D	4.30	1.42	4.40	1.36	3.60	1.62
E	3.00	1.22	4.75	1.30	5.75	3.11
F	5.57	2.13	5.86	0.99	4.57	2.77
G	4.50	1.05	5.54	1.87	5.57	1.59
H	3.07	0.88	2.80	1.99	3.64	1.59
I	3.70	2.15	6.00	2.57	7.25	1.39
J	4.75	1.20	7.25	2.68	6.88	2.20
K	2.86	1.46	4.57	1.92	3.57	2.38
Overall	3.93	0.86	5.12	1.06	5.31	1.35

Table 4-7

*ANOVA Summary Table for Test Scores in Writing Unit using a Repeated Measures Design*

Source	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Subjects	10				
Within Subjects	22				
Treatment	2	12.28	6.14	8.39	.0023
Residual	20	14.64	0.73		

Note: *n* of schools = 11

\*Significance was set *a priori* at the .05 level

*Research Question Two – Hypothesis Four*

Research question two sought to identify if a correlation existed between student knowledge increase and socioeconomic status. Socioeconomic status was determined by schools that are categorized as a Title 1 school. When a school is categorized by the government as a Title 1 school, 40% or more of the student population is considered low income. Of the 11 schools in the sample, six were categorized as Title 1 schools. A t-test was run on the pre and delayed posttest scores from each school. Results of this analysis showed significant increase in scores for eight of the schools. Of the eight schools showing significant differences in scores, half were title one schools while the other half were not. Table 4-8 shows each school, with their Title 1 status, that participated in the program and there representative t-test results based on a comparison between the pretest to the delayed posttest data.

Table 4-8

*Socioeconomic Title 1 Status and t-test Results from Pretest to Delayed Posttest*

School	<u>Title 1</u>	<u>Overall Test Scores</u>		
	Yes/No	<i>T</i>	<i>df</i>	<i>p</i>
A	No	3.32	10	.01*
B	Yes	8.97	11	.00*

\**t* value significance was set *a priori* at the .05 level

Table 4-8 (*continued*)

*Socioeconomic Title 1 Status and t-test Results from Pretest to Delayed Posttest*

School	Title 1	Overall Test Scores		
	Yes/No	T	df	p
C	Yes	3.66	7	.01*
D	Yes	2.56	9	.03*
E	Yes	2.20	3	.12
F	No	.41	6	.70
G	No	4.93	13	.00*
H	Yes	6.63	13	.00*
I	No	7.95	7	.00*
J	No	4.07	7	.01*
K	Yes	1.86	6	.11

\*t value significance was set *a priori* at the .05 level

A Pearson product correlation was run between classification of Title 1 and significance found between pretest and delayed posttest (Table 4-9). There was not a significant correlation ( $r = .14, p = .66$ ) found between variables. Data showed that socioeconomic status of schools had no relationship with student knowledge gained throughout the program; therefore, null hypothesis four was rejected and the alternative hypothesis was accepted.

Table 4-9

*Pearson Product Correlation of Socioeconomic Status Classification and Significant Difference Found from Pretest to Delayed Posttest*

	Socioeconomic Status	Significant Difference Between Pre- and Delayed Posttest
Socioeconomic Status	1.00	.15
Significant Difference Found: Pre- and Delayed Posttest		1.00

\*r value significance was set *a priori* at the .05 level

*Research Questions Three*

For student perceptions, students were given a series of 20 questions based on a 1 to 7 Likert-type scale (1 = strongly disagree to 7 = strongly agree) regarding their enjoyment,

interest, and the practicality of the lessons taught. Negatively worded questions were reverse coded for analysis.

*How do students perceive the photography curriculum associated with the Visual Communications curriculum developed for this program?*

For the photography curriculum unit, overall students were agreeable in each category (interest, enjoyment, and practicality). Students agreed the curriculum was enjoyable overall ( $M = 5.15, SD = 5.38$ ), was practical ( $M = 5.38, SD = 1.12$ ), and interesting ( $M = 5.27, SD = 1.12$ ). Table 4-10 notes students' perceptions of the photography unit for each school. Taylor and Harrison schools rated the photography unit the highest among all schools averaging a mean score of 6 or greater (on a 7 point Likert scale) in each area (enjoyment, practicality, and interest).

Table 4-10

*Student Perceptions for the Photography Unit*

School	n	Enjoyment		Practicality		Interest	
		M	SD	M	SD	M	SD
A	11	4.72	1.25	4.66	1.46	4.50	1.23
B	12	5.53	0.75	5.94	0.88	5.89	0.87
C	10	5.20	.89	5.50	.93	5.53	.85
D	9	6.22	0.54	6.48	.33	6.52	.36
E	4	4.58	2.03	4.17	2.06	4.64	2.04
F	7	5.36	.93	5.71	.59	5.37	.85
G	14	4.83	1.07	5.13	.84	5.09	.96
H	14	5.44	.99	5.50	1.20	5.37	1.35
I	10	4.67	1.37	5.01	1.15	5.03	1.30
J	8	6.13	.73	6.21	.44	6.09	.57
K	7	4.60	1.06	4.72	.97	4.24	1.23
Overall	106	5.15	1.13	5.38	1.12	5.27	1.12



*How do students perceive the writing curriculum associated with the Visual Communications curriculum developed for this program?*

Student perceptions indicated they were neutral or disagreed with statements throughout the writing unit. Students disagreed with enjoyment ( $M = 3.85$ ,  $SD = 1.26$ ) of the writing curriculum and were neutral for the practicality ( $M = 4.43$ ,  $SD = 1.45$ ), and interest ( $M = 4.25$ ,  $SD = 1.30$ ) categories. Table 4-11 notes students' perceptions for the writing unit for each school. Student perceptions of the writing unit of the series were lowest of all curriculum areas with many schools disagreeing, being neutral, or only slightly agreeing with the enjoyment, practicality and interest in the topic.

Table 4-11

*Student Perceptions of the Writing Curriculum Unit*

School	<i>n</i>	<u>Enjoyment</u>		<u>Practicality</u>		<u>Interest</u>	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	11	4.39	1.15	4.06	1.67	4.32	1.63
B	12	4.00	1.16	4.61	1.22	4.46	1.14
C	10	3.90	1.01	4.47	1.32	4.11	1.29
D	9	3.56	1.52	3.13	2.20	2.91	2.09
E	4	2.54	1.64	3.67	.90	4.00	1.40
F	7	4.00	1.22	4.74	1.94	4.57	1.57
G	14	3.12	1.20	4.11	1.47	3.90	1.00
H	14	4.08	1.15	4.38	1.13	4.30	1.29
I	10	4.04	.92	5.24	.79	4.60	.86
J	8	4.70	.75	5.46	0.96	4.98	1.01
K	7	3.72	2.07	4.18	1.59	4.17	1.39
Overall	106	3.85	1.26	4.43	1.45	4.25	1.30

*How do students perceive the videography curriculum associated with the Visual Communications curriculum developed for this program?*

Students were agreeable but not highly agreeable in each category (interest, enjoyment, and practicality) for the videography curriculum unit. Students agreed they enjoyed ( $M = 5.02$ ,  $SD = 1.16$ ) the curriculum. Students also agreed the curriculum was practical ( $M = 5.12$ ,  $SD = 1.09$ ) and were interested ( $M = 5.21$ ,  $SD = 1.14$ ). Table 4-12 notes students' perceptions of the videography unit for each school.

Table 4-12

*Student Perceptions of the Videography Unit*

School	n	Enjoyment		Practicality		Interest	
		4.24	1.28	M	SD	M	SD
A	11	5.41	1.02	4.11	.79	4.43	1.23
B	12	4.62	.56	5.49	1.15	5.46	1.19
C	10	3.86	1.51	4.81	.65	4.80	.80
D	9	6.21	.92	5.36	.94	4.78	1.38
E	4	5.86	.75	5.36	1.11	5.61	1.15
F	7	5.00	1.26	5.73	.79	6.02	.61
G	14	4.92	1.20	5.02	1.09	5.28	1.11
H	14	4.39	1.10	5.15	1.60	5.10	1.54
I	10	5.81	.76	5.26	.92	5.46	.89
J	8	4.67	.71	5.84	.47	5.79	.59
K	7	5.02	1.16	4.17	1.24	4.55	1.37
Overall	106	4.24	1.28	5.12	1.09	5.21	1.14

*How do students perceive agricultural communications curriculum developed for this program?*

For the visual communications curriculum (combined photography, writing and videography), students were agreeable in each category but not highly agreeable. Across the sample students “agreed” they enjoyed ( $M = 5.53$ ,  $SD = 0.91$ ), saw it is practical ( $M = 5.56$ ,  $SD =$

.98), and agreed they were interested ( $M = 5.61$ ,  $SD = 0.92$ ) in the topics covered. Table 4-13 notes students' perceptions for all curriculum units for each school. School A scored this section the lowest of all schools with all categories averaging neutral to agree; while school F scored this highest of all school with each curriculum category averaging somewhat agree to strongly agree.

Table 4-13

*Student Perceptions of the Agricultural Communications Curriculum*

School	<i>n</i>	<u>Enjoyment</u>		<u>Practicality</u>		<u>Interest</u>	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	11	4.90	.67	4.58	1.01	4.95	1.00
B	12	5.88	.42	6.12	.41	6.17	.44
C	10	5.42	.73	5.50	.69	5.76	.55
D	9	5.76	.85	5.46	1.31	5.41	1.31
E	4	4.88	1.61	4.79	1.75	5.04	1.10
F	7	6.21	0.72	6.45	.71	6.37	.26
G	14	5.11	1.13	5.21	.88	5.07	.98
H	14	5.49	.90	5.73	.94	5.75	.93
I	10	5.31	.84	5.41	.57	5.46	.59
J	8	6.10	.60	5.79	.50	5.96	.68
K	7	6.00	.91	6.14	.52	5.86	.83
Overall	106	5.53	.91	5.56	.98	5.61	.92

*How do students perceive the experiential learning activity (mobile classroom) associated with this program?*

Overall students were agreeable with statements regarding the mobile classroom project in all assessment categories (enjoyment, practicality, and interest). On a seven point Likert type scale (with 7 being strongly agree), students rated their enjoyment of the experiential learning activity to be agreeable to moderately agreeable ( $M = 5.85$ ,  $SD = 0.85$ ), and their interest in the projects ( $M = 5.77$ ,  $SD = 1.01$ ). Students also agreed that the projects were practical ( $M = 5.91$ ,

$SD = .98$ ). Table 4-14 displays students' perceptions of the experiential learning activity with the mobile classroom in each area for each school. Participant's from all schools enjoyed, saw the practicality of, and had interest in the mobile classroom experience and video production activity with all averaging agree to strongly agree.

Table 4-14

*Student Perceptions of the Mobile Classroom Experience*

School	<i>n</i>	<u>Enjoyment</u>		<u>Practicality</u>		<u>Interest</u>	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
A	11	5.15	.74	5.19	1.35	5.54	1.32
B	12	6.04	.54	6.02	.43	6.24	.45
C	10	5.53	.73	5.89	.69	5.99	.78
D	9	5.80	1.11	5.95	1.43	5.65	1.43
E	4	5.58	1.49	5.61	1.25	5.68	.88
F	7	6.17	.54	6.37	.79	6.63	.31
G	14	5.67	.84	5.41	.85	5.54	.97
H	14	5.81	1.07	5.62	1.33	6.01	1.02
I	10	6.15	.51	5.96	.64	5.75	.69
J	8	6.35	.59	6.14	.54	6.52	.49
K	7	5.86	1.21	5.32	1.32	5.31	1.55
Overall	106	5.85	.85	5.77	1.01	5.91	.98

*Research Question Four*

Research question number four addressed skills taught through the objectives of the curriculum being apparent in student video projects. A video content analysis was completed for each video produced during the project. Videos were assessed for competencies and objectives from each curriculum area (photography, writing, and videography).

## Photography

In the photography curriculum area, four areas of content were assessed; (a) image choice for stories, (b) elements of composition, (c) photo manipulation, and (d) photo captions. One hundred percent of the videos using images displayed proper choice of images to help enhance or portray their topic. Analysis of videos utilizing elements of photo composition showed students used the “centering/symmetry” composition element most often with a range of zero to 24 uses per video ( $M = 3.47$ ,  $SD = 4.41$ ). The composition element used the least was “framing” with a range of zero to five uses per video ( $M = 1.60$ ,  $SD = 1.24$ ). Table 4-15 displays student use of all photo composition elements.

Table 4-15

Element	<i>M</i>	<i>SD</i>
Centering/Symmetry	3.47	4.41
Framing	1.60	1.24
Line	3.33	2.33
Rule of Thirds	2.77	2.14
Simplicity	2.73	2.32
Subject/Background Relationship	1.86	1.86

Photo/image manipulation was the third key objective analyzed in the videos from the photography unit. Of the 599 photos identified, 50.11% were manipulated correctly or did not need manipulated further. The final competency from the photography unit that was analyzed in the student created videos was photo captions used. Only 12 videos utilized photo captions in their video. Of the captions that were written (20 total), 19 were written correctly.

### *Writing*

Student created videos were analyzed based on writing techniques used that were taught in the curriculum unit. Video projects were assessed to determine if the audience was able to identify the “who”, “what”, “where”, “when”, “why”, and “how” of the story being told. One hundred percent of the videos produced properly told a story through video that addressed the above outlined key components taught. Also, program facilitators noted that 100% of the students utilized a storyboard as well as a modified script for producing their videos although, a portion of the scripts were limited.

### *Videography*

The final unit analyzed was videography. This unit included proper camera techniques, recording interviews, and ensuring the video footage used directly related to the story being told. Forty out of the 49 (81.63%) of the videos properly utilized a tripod to stabilize their video footage, while 9 out of 49 (18.36%) videos should have but did not utilize a tripod to capture their footage. In addition to using proper equipment for stability, lighting was assessed in the videos created. Forty seven of the 49 (95.91%) videos displayed consistent lighting throughout the video while 2 of the 49 (4.08%) did not. Next, interviews conducted for the created videos were assessed. Fifteen of the 49 videos created utilized an expert in the field via an interview for the produced video. Of those 15 interviews, 100% were conducted correctly and were used to enhance the video and storyline. The final unit of analysis for the video content was the overall video footage and how it related to the story being told. Of the 49 videos produced, 48 had video/image footage directly related to the story being told through film.

## **Chapter Summary**

This chapter presented findings obtained from this study. Results addressed the research questions and hypotheses. The results discussed student knowledge gained throughout the program in different curriculum areas, student perceptions of curriculum areas, and the experiential learning project, as well as applied competencies in the video projects. Hypotheses one through three were rejected due to significant differences in test scores across each curriculum unit. Also, it was established that socioeconomic status of schools had no effect on student test scores. Student perceptions tended to be agreeable with statements of enjoyment, practicality, and interest in the content areas of photography and videography, while they were disagreeable with the same statements for the writing unit. For the mobile classroom, students were agreeable with statements in each area (enjoyment, practicality, and interest). A content analysis was completed for each student video produced and found that students successfully applied competencies taught in the curriculum throughout their videos.

## **CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS**

### **Purpose Statement**

The purpose of this study was to assess student knowledge gained and retained through of visual communications curriculum (including photography, writing, and videography) and an experiential learning (mobile classroom) activity using pre-, post-, and delayed posttests, as well as a video content analysis. Also, student perceptions were analyzed to determine the enjoyment, practicality and overall interest of the curriculum and the experiential learning activity.

This study was guided by the following research questions:

1. Does student knowledge increase in competency areas associated with photography, writing, and videography [visual communications] curriculum throughout the program?
2. Does student achievement, specifically measured in knowledge gained, vary throughout socioeconomically different schools from time before exposure to the curriculum to the completion of the experiential learning activity?
3. Do students perceive the visual communications curriculum as enjoyable, valuable, and/or practical?
4. Are skills taught through the objectives of the visual communications curriculum visible in student video projects?

### **Hypotheses**

Based on the research questions, the following hypotheses were formulated:

$H_{01}$ : In the sample, there will be no significant difference in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.



Ha<sub>1</sub>: In the sample, there will be a significant increase in knowledge level of photography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>2</sub>: In the sample, there will be no difference in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>2</sub>: In the sample, there will be a significant increase in knowledge level of writing competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>3</sub>: In the sample, there will be no difference in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ha<sub>3</sub>: In the sample, there will be a significant increase in knowledge level of videography competencies from the time before exposure, to the time after curriculum completion, to the time after students participate in the mobile classroom.

Ho<sub>4</sub>: In the sample, there will be no relationship between increased test scores of students and socioeconomic status of the school they attend.

Ha<sub>4</sub>: In the sample, there will be a relationship found between increased test scores and socioeconomic status of students.

### **Summary of Findings**

#### *Research Question One- Hypothesis One*

Null hypothesis one stated that there would be no difference in knowledge level of photography competencies from the time before exposure to the time after curriculum, to the

time after students participate in the mobile classroom. Null hypothesis one was tested using a repeated measures analysis of variance. This analysis revealed a significant effect of curriculum on test scores,  $F(2, 20) = 11.82; p = .0004$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 8.86; p = .0139$  and delayed posttest scores  $F(1, 10) = 61.99; p < .0001$ . Null hypothesis one was rejected and the alternative hypothesis was accepted.

#### *Research Question One - Hypothesis Two*

Null hypothesis two stated that there would be no difference in knowledge level of writing competencies from the time before exposure, to the time after curriculum, to the time after students participated in the mobile classroom experience. Null hypothesis two was tested using a repeated measures analysis of variance. Analysis revealed a significant effect of curriculum on all test scores,  $F(2, 20) = 14.52; p = .0001$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 25.37; p = .0005$  and the delayed posttest scores  $F(1, 10) = 27.70; p < .00$ . Null hypothesis two was rejected and the alternative hypothesis was accepted.

#### *Research Question One - Hypothesis Three*

Null hypothesis three stated that there would be no difference in knowledge level of videography competencies from the time before exposure, to the time after curriculum, to the time after students participate in the mobile classroom. Null hypothesis three was analyzed using a repeated measures analysis of variance. This analysis revealed a significant effect of curriculum on test scores,  $F(2, 20) = 8.39; p = .0023$ . Contrasts showed that the pretest scores were significantly lower than the posttest scores  $F(1, 10) = 17.16; p = .0020$ , and the delayed

posttest scores  $F(1, 10) = 8.60; p = .0150$ . Null hypothesis three was rejected and the alternative was accepted.

#### *Research Question Two – Hypothesis Four*

Research question two sought to identify if a correlation existed between student knowledge increase and socioeconomic status. There were 11 schools in the sample, six of these schools were categorized as low socioeconomic status schools, based on Title 1 status. A paired samples t-test was run on the pre- and delayed posttest scores from each school. Results of this analysis showed significant increase in scores for eight of the schools. Of the eight schools showing significant differences in scores, half were Title 1 schools while the other half were not. Since significance was found evenly among both categories of schools, it is believed that socioeconomic status had no impact on the knowledge level of students as it pertains to this study. Null hypothesis four was accepted.

#### *Research Question Three*

Student perceptions were measured for each curriculum unit, the overall curriculum, as well as the experiential learning activity using a 20 questions instrument. Each question on the instrument was based on a one to seven point Likert-type scale regarding student's enjoyment, interest, and the practicality of the lessons taught. Negatively worded questions were reverse coded for analysis. For the photography unit students were agreeable in each category: (a) enjoyment ( $M = 5.15, SD = 5.38$ ), (b) practicality ( $M = 5.38, SD = 1.12$ ), and (c) interest ( $M = 5.27, SD = 1.12$ ). Students disagreed that the writing curriculum was enjoyable, and were neutral on the practicality and interest of the curriculum. For writing curriculum students disagreed with the enjoyment ( $M = 3.85, SD = 1.26$ ), were neutral regarding the practicality ( $M = 4.43, SD = 1.45$ ) and interest ( $M = 4.25, SD = 1.30$ ). Students were agreeable but not highly agreeable in

each category (interest, enjoyment, and practicality) for the videography curriculum unit. Students agreed they enjoyed ( $M = 5.02, SD = 1.16$ ) the curriculum thought it was practical ( $M = 5.12, SD = 1.09$ ) and were interested ( $M = 5.21, SD = 1.14$ ) in it. Across the sample students agreed they enjoyed ( $M = 5.53, SD = 0.91$ ), saw it is practical ( $M = 5.56, SD = .98$ ), and agreed they were interested ( $M = 5.61, SD = 0.92$ ) in the topics covered when questioned about the three units as a set. Overall students were agreeable with statements regarding the experiential learning activity in each assessment categories (enjoyment, practicality, and interest). Students rated their enjoyment of the activity to be agreeable to moderately agreeable ( $M = 5.85, SD = 0.85$ ), and their interest in the projects ( $M = 5.77, SD = 1.01$ ). Students also agreed that the projects were practical ( $M = 5.91, SD = .98$ ).

#### *Research Question Four*

Research question number four addressed skills taught through the objectives of the curriculum being apparent in student video projects. A video content analysis was completed for each video produced during the project. Videos were assessed for specific competencies and objectives from each curriculum area (photography, writing, and videography) used by students to complete the project. For photography, key elements of photo composition were identified for images used throughout the video projects and the “centering/symmetry” composition element was used most often with a range of zero to 24 ( $M = 3.47, SD = 4.41$ ). Also, students used photo manipulation skills to make basic edits to 50% of the images used but should have further used these skills to manipulate the other half of photos identified. In addition to utilizing the elements of composition and photo manipulation, captions for photographs used in student video projects were assessed. Captions were not required for photos used in the videos, but of the captions written 19 out of the 20 total captions identified were written correctly.

The key objectives of the writing unit were ensuring the audience could identify a “who”, “what”, “where”, “when”, “why”, and “how” of the story being told. One hundred percent of the videos produced properly outlined the key components of a story. Also, program facilitators noted that 100% of the students utilized a storyboard as well as a modified script to produce their videos.

The final unit analyzed was videography. This unit included proper camera techniques, recording interviews, and ensuring the video footage used directly related to the story being told. Students properly used tripods to stabilize their camera 83.33% of the time and videos represented consistent lighting 95.91% of the time. While interviews were not a required component of the video, 15 projects conducted an interview on camera. Of those 15 interviews, 100% were conducted correctly and were used to enhance the video and storyline. The final unit of analysis for the video content was the overall video footage and how it related to the story being told which showed that 48 of the 49 videos were successful at capturing and displaying quality video footage.

### **Conclusions**

The 2011-2015 National Research Agenda called for more meaningful, engaged learning in all environments (priority number four) as well as efficient and effective agricultural education programs (priority number five) (Doerfert, 2011). The Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program allowed secondary students to take an active role in the learning process after completing agricultural communications curriculum taught by their agricultural science instructor. By following Kirkpatrick’s (1994) Learning Evaluation Model, this study assessed student

perceptions (level 1: attitudes) and student knowledge levels (level 2: learning) throughout the program.

Attitudes were assessed using an instrument with 20 Likert-type scale statements. Overall, students generally agreed that they enjoyed, were interested in, and saw practicality in studying the units of agricultural communications curriculum. Therefore, collaboration (which is a method used through the curriculum's design) may have led students to have more positive perceptions; resulting in further understanding which agrees with Edgar (2011) and constructivist approaches to learning (Duffy et al., 1993). It can be postulated that positive perceptions may have resulted in the basis for curriculum development where students could actively apply new concepts and ideas (USC-CET, 2006). Further it was found that students perceived the experiential (mobile classroom) activity to be positive regarding their enjoyment, interest, and its practicality. Combined with the curriculum presented, this experiential activity may have elevated student perceptions (Kolb, 1984).

Learning was assessed using a pretest, posttest, and delayed posttest. Newcomb et al. (2004) indicated that good evaluation of learning was based on the objectives set forth in the lesson. With that understanding, questions on these instruments were developed based on the specific objectives listed in the lesson plans provided to teachers. A significant difference was seen in each unit from pretest to posttest and pretest to delayed posttest. This indicated that students were learning information taught throughout the curriculum and retaining it over time. Although there was not a significant increase in scores from posttest to delayed posttest, raw mean scores did not decrease. In this case, the researcher believed that the experiential learning activity served as an educational enforcement. Due to the learning that occurred from pretest to posttest higher levels of Bloom's (1956) Taxonomy (synthesis and application) were reached

during the experiential learning activity. On the delayed posttest, the synthesis and application of previously learned information may have allowed students to perform at or above (although not significantly above) the level they had performed prior on the posttest.

The Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program allowed students to make reflective observations and apply abstract conceptualizations (Kolb, 1984) taught via curriculum and applied during the mobile classroom experience. Students then applied concrete experiences along with active experimentation (Kolb, 1984) during the video production process, which positively impacted student perceptions. Each lesson plan was designed to allow students to collaborate and reflect on new information. This allowed for students to develop a stronger understanding of each concept by the time they applied it when creating their videos. While creating their videos, students were able to see how all the pieces of the curriculum fit together and were used to create a finished product (video posted to YouTube).

Wagner (2008) discussed the need for students to analyze and interpret media and create and produce projects using digital media. This study showed that students do prefer to engage in this type of learning and are successful when doing so. Therefore, this research supports previous research noting that experiential learning activities can positively impact students at the secondary level through creating meaning (Brooks & Brooks, 1999).

### **Recommendations for Practitioners**

In *Born Digital*, Palfrey and Gasser (2008) stated that learning environments “where students are doing applied work, research and writing, and problem solving are obvious places to seek integration” of digital technologies and that technology should be a part of the “every-day curricula in schools” where appropriate (p. 247). Agricultural education has many academic

areas where technology can be integrated, agricultural communications being one. Expanding agricultural education curriculum to add communications knowledge, skills, and competencies will aid in meeting the needs of today's agricultural industry. In addition, secondary teachers will be giving their students opportunities to find jobs and seek post-secondary education in competitive career fields.

Since the 1990s, agricultural communications had evolved into a highly competitive industry requiring knowledge of business practices and editorial skills as well as farming (Burnett & Tucker, 2001). "Visual images are very powerful in their occupation of the public's time and the shaping of how we process our surrounding environments" (Sadler-Trainor, 2005, p. 9). As more people become disconnected from production agriculture and receive an increased amount of information through digital means, visual promotion may play an increased role in perpetuating agriculture. In 2010, over three hundred million people were living in the United States (USDA, 2010). Of that population, less than 1% claimed farming as an occupation (and about 2% actually live on farms). Therefore, there is a need to tailor agricultural curriculum to the non-farm student. According to [website-monitoring.com](http://website-monitoring.com) (2010), the number of hits to videos on YouTube exceeds two-billion per day, and the number of advertisers has increased ten-fold in the past year. Schools could continue to create video projects on their own without the mobile classroom component. If funding is available, teachers could purchase the equipment and software needed to more fully engage students with digital, visual media. If funding is not available, videos may still be produced, because many schools have digital cameras with photo and video capabilities that teachers can reserve, and freeware such as Windows Movie Maker (video editing) and GIMP (photo editing) are available for download at no cost. These devices and electronic software could be used along with the developed curriculum to serve the same



purpose as outlined by this program. In order for teachers to be successful, workshops should be conducted by knowledgeable university faculty and staff to ensure that secondary teachers are informed and comfortable with the digital and visual technology. Teaching students to promote agriculture via short videos provides an additional outlet for those disconnected with agriculture to find information.

To more effectively reach a large audience, the curriculum used in this study could be expanded. “Young people need to analyze and interpret new media; they need to produce and create, and they need to understand the ethical implications of their work and the new technologies” (Wagner, 2008, p. 189). Some areas which could be included if expanding this curriculum into a full semester course could be web design, promotion through social media, and more detailed information on the photography, writing, and videography units previously created. Expanding the visual communications curriculum and implementing more agricultural communications units into secondary agricultural education programs will help meet the rising demand for agricultural communications professionals.

Although this program was focused in Arkansas, these concepts can be implemented to other state agricultural science programs. Curriculum requirements vary from state to state, but can be found on most state department of education websites. Utilizing this information, each curriculum area could be adapted to meet the needs of agricultural teachers and students in each state. Another option would be for university faculty, state agricultural education staff, and the National FFA Organization to work together to develop a course specific to agricultural communications. Once the course was developed states could modify it to meet specific state education requirements.

### **Recommendations for Further Research**

With the curriculum developed and early adopters incorporating the resources into their courses, further research should be completed to reassess the diffusion process. Rogers (2003) discussed the role of the early adopter and stated that “the early adopter is respected by his or her peers and is the embodiment of successful, discrete use of new ideas” (p. 283). The early adopters who taught the visual communications curriculum as part of this program should be surveyed to assess their overall perceptions of the program and instruments. Teachers and researchers should also identify training needs for this type of curriculum. With agricultural communications being a relatively new topic in secondary agricultural education programs, established teachers may have a difficult time understanding the material themselves. Research should seek to improve the curriculum and ensure that teachers are satisfied with the materials as outlined in this program. Ensuring that early adopters are satisfied with the program could help diffuse the curriculum throughout Arkansas.

In education, the diffusion process can be delayed due to state testing requirements and teacher responsibility and focus being on state educational frameworks. If teachers do see value in this curriculum, steps should be taken to develop a more in-depth course and create state framework for a course specific to agricultural communications. This would allow secondary teachers more flexibility in adopting the curriculum.

In addition to surveying teachers, students who participated in the Visual Communications on the Road in Arkansas: Creative Photo and Video Projects to Promote Agriculture program should be surveyed to determine if the knowledge and skills gained throughout the program influenced them to create videos on their own time or look further into careers related to agricultural communications. The assessment of student perceptions showed

that students enjoyed the curriculum and noted that it was practical. Therefore, further research on the impact of this type of curriculum in agricultural education should be assessed. Evaluating these areas will further strengthen the research because it completes all four levels in Kirkpatrick's (1994) Education Evaluation Model. Contact information of participants was collected and placed in a database for future research. Participants should be contacted during their senior year of high school to determine if they plan on pursuing degrees in agriculture and specifically agricultural communications. Also, over time the videos posted to YouTube should be monitored to determine the traffic (viewer frequency) and assess feedback from viewers.

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## **Appendices**



**Appendix A**  
**IRB Approval**



120 Ozark Hall • Fayetteville, Arkansas 72701 • (479) 575-2208 • (479) 575-3846 (FAX)  
Email: [irb@uark.edu](mailto:irb@uark.edu)

**Research Support and Sponsored Programs  
Institutional Review Board**

October 12, 2010

MEMORANDUM

TO: Leslie Edgar  
Don Edgar  
Casandra Cox  
Kristin Pennington

FROM: Ro Windwalker  
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 10-10-137

Protocol Title: *Visual Communications on the Road in Arkansas: Video and Photo Creative Projects to Promote Agriculture*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Approved Project Period: Start Date: 10/12/2010 Expiration Date: 10/11/2011

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Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Compliance website (<http://www.uark.edu/admin/rsspinfo/compliance/index.html>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

If you wish to make *any* modifications in the approved protocol, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 120 Ozark Hall, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

The University of Arkansas is an equal opportunity/affirmative action institution.



# UNIVERSITY OF ARKANSAS

Office of Research Compliance  
Institutional Review Board

September 23, 2011

## MEMORANDUM

TO: Leslie Edgar  
Don Edgar  
Casandra Cox  
Kristin Pennington

FROM: Ro Windwalker  
IRB Coordinator

RE: PROJECT CONTINUATION

IRB Protocol #: 10-10-137

Protocol Title: *Visual Communications on the Road in Arkansas: Video and Photo Creative Projects to Promote Agriculture*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Previous Approval Period: Start Date: 10/12/2010 Expiration Date: 10/11/2011

New Expiration Date: 10/11/2012

Your request to extend the referenced protocol has been approved by the IRB. If at the end of this period you wish to continue the project, you must submit a request using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. Failure to obtain approval for a continuation on or prior to this new expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

**This protocol has been approved for 1,025 participants.** If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior* to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

210 Administration Building • 1 University of Arkansas • Fayetteville, AR 72701  
Voice (479) 575-2208 • Fax (479) 575-3846 • Email [irb@uark.edu](mailto:irb@uark.edu)

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**Appendix B**  
**Participation Consent Form**



Department of Agricultural and Extension Education



205 Agriculture Building, University of Arkansas, Fayetteville, AR 72701-1201
479-575-2035 • Fax: 479-575-2610 • aeed.uark.edu

Date

Dear students and parents:

I am a graduate student at the University of Arkansas where I am working on my master's thesis. I am conducting research on student knowledge acquisition through instruction of agricultural communications curriculum and perceptions regarding learning. The goal of the research is to determine if instruction over agricultural communications increases student knowledge about communication topics and whether or not an experimental experience solidifies learning.

The students will be given multiple lectures and activities over photography, writing techniques, and videography. Following classroom instruction, students will be visited from the University of Arkansas' Visual Communications Mobile Classroom. In the mobile classroom they will be able to edit photos and video footage, set photos and video to music, and compose a video promoting agriculture.

There is no risk connected to this project. Participation in the project is voluntary and if students wish not to participate in the project their grade in the class will not be jeopardized and they will still have the opportunity to participate in the lecture and the mobile classroom visit.

By signing below you authorize your child to participate in the research project and have data collected on their knowledge acquisition and perceptions. If you have any questions you can contact me at the information below. Thank you for your support and participation.

Sincerely,

Kristin M. Pennington (handwritten signature)

Kristin M. Pennington, Graduate Student
Department of Agricultural and Extension Education
University of Arkansas
205 Agriculture Building
Fayetteville, AR 72701
(479) 575-4053
khopper@uark.edu

Leslie D. Edgar (handwritten signature)

Leslie D. Edgar, Assistant Professor
Department of Agricultural and Extension Education
University of Arkansas
205 Agriculture Building
Fayetteville, AR 72701
(479) 575-6770
ledgar@uark.edu

Parent or Guardian:

Signature Print name Date

Student:

Signature Print name Date

This research study has been reviewed by the Institutional Review Board at University of Arkansas. For research-related problems or questions regarding subjects' rights, you can contact Ro Windwalker, the University's Compliance Coordinator, at 479-575-2208 or email irb@uark.edu.

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**Appendix C**  
**Lesson Plans**

## **Photography**

## **Photography Lesson One: Camera Basics**

### **Materials List:**

- PowerPoint
- Handouts
- Student Worksheet

**Situation:** Introduction to Agricultural Communications-Photography

### **Objectives:**

- Label parts of a camera on a worksheet with 85% accuracy.
- Show knowledge of cameras by naming the two types verbally with 100% accuracy.
- Explain steps of how to take a photo on a quiz with 80% accuracy.

### **Key Terms:**

- Analog camera
- Digital camera
- Point and Shoot (P&S)
- Single Lens Reflex (SLR)

### **Interest Approach (5 minutes):**

Ask the students if they have a camera at home. Ask them if it takes film or is digital.

Do they consider their photographs to be “quality”?

What are some reasons people take pictures?

- For fun?
- To capture memories?
- For their job?
- To document an event (newspapers, websites)?

After they answer, tell the students that today we will learn the parts of a camera and basic information about it so that in the days to come we will be able to learn how to take great pictures.

### **Reasons to Learn:**

- Why should we know how to pick a camera?
- Why should we know how our camera works?
- Why should we learn the parts of a camera?
- Why should we know how to take pictures?

### **Questions to Answer:**

- What are different types of cameras?
- What makes a camera work?
- What are the similarities and differences between film and digital?
- How do we take pictures?



### Answers to Questions (20 minutes):

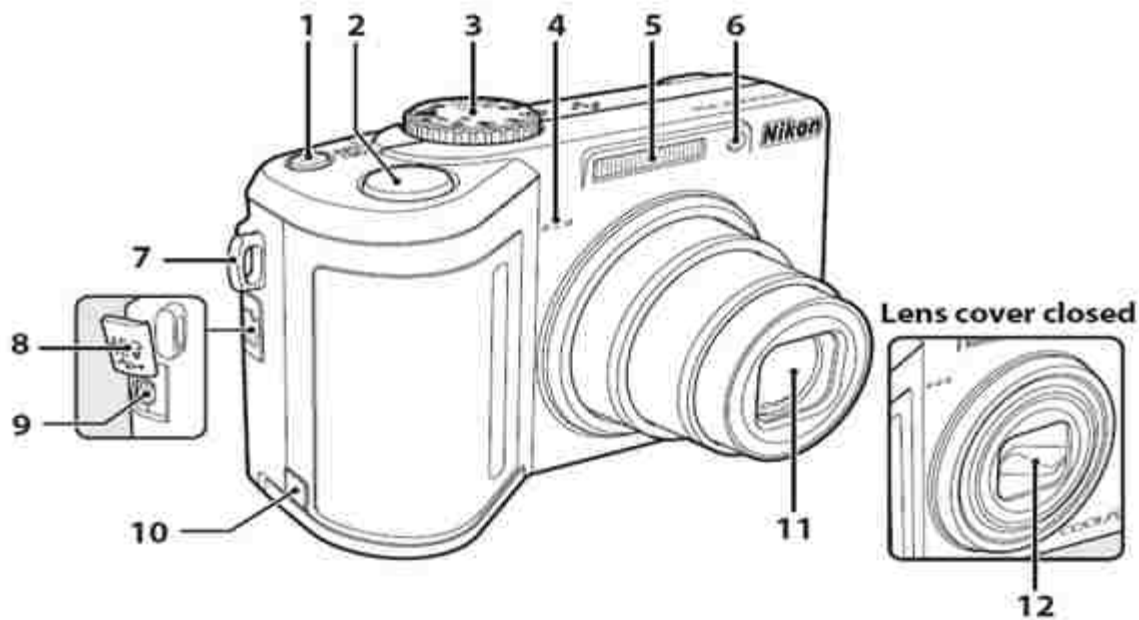
- What types of cameras are there?
  - Two types, film or analog and digital. Film and digital cameras have similarities and differences. The main differences between the two are in the technical aspect of creating the photo. Film uses a chemical reaction to create the image on the film, whereas a digital camera uses a series of mirrors to reflect the image on a digital storage chip.
- Film
  - A film camera is made of three basic elements:
    - Optical (the lens)
    - Chemical (the film)
    - Mechanical (the camera body)
    - The three elements combine to create a printable image.
  - Two Types: Point and Shoot & Single Lens Reflex
    - **Point and Shoot (P&S)**
      - The viewfinder provides a rough idea of what is in view, but not the real image.
      - This occurs because you are not looking through the lens.
      - *Activity:* Have students make a viewfinder with their fingers (by placing the tips of their right thumbs to the tip of their left index finger and left thumb to tip of their right index finger). Once they have made the rectangle, have them close in on the rectangle making it smaller. They can do this by moving their thumbs closer together. Have them simulate a camera by closing one eye and holding their simulated viewfinder over their open eye. This is what taking a P&S photo is like.
      - P&S are great for capturing memories
    - **Single Lens Reflex (SLR)**
      - You see the actual image that will be exposed onto the film.
      - Great for capturing images with real impact.
      - Provides more control and better images than P&S.
      - *See video on PowerPoint (PPT) for SLR animation in resources and lesson plan.*
- Digital
  - A digital camera records images electronically using a built-in processor.
  - Has a lens like an analog camera
  - BUT, the lens refracts light onto computer chips rather than film.
  - Types of Digital Cameras
    - Similar features to film counterparts
    - Rely on electronic processing and storage
    - **Point and Shoot (P&S)**

- Most feature LCD screens and advanced zoom lenses
- **SLR**
  - Can switch out lenses like an analog version
  - Allows user an accurate preview

### Parts of a Camera

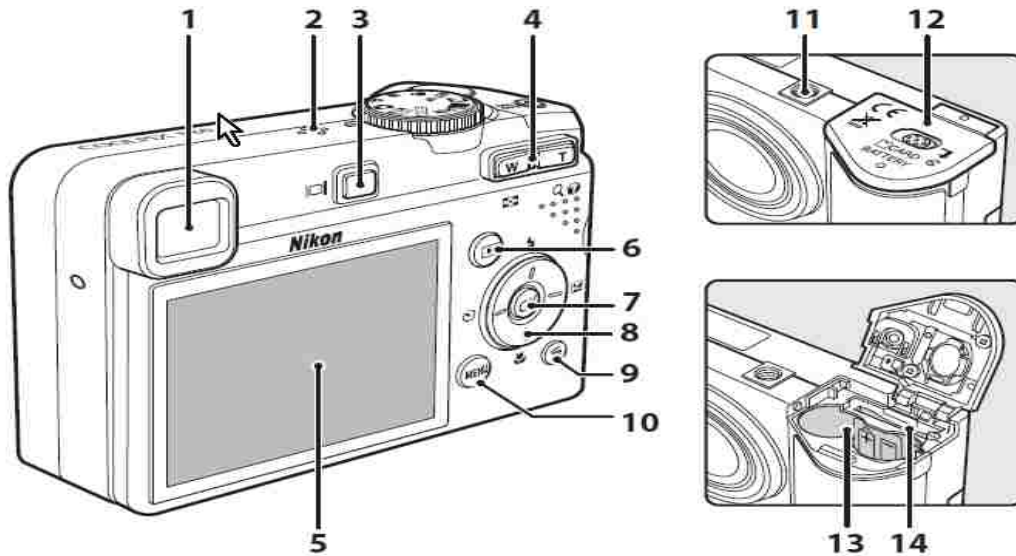
For the identification part of this lesson, we are going to concentrate on a point and shoot (a camera designed primarily for simple operation) digital camera. *Most* of the parts will be similar to those on any other camera you will come in contact with, including film cameras. *See the additional information in the available handout for this lesson.*

Figure 1. Front View of a Digital (Point and Shoot) Camera



- |                     |                           |
|---------------------|---------------------------|
| 1. On/Off           | 8. Connector cover        |
| 2. Shutter Release  | 9. Cable Connector        |
| 3. Mode Dial        | 10. Power Connector Cover |
| 4. Microphone       | 11. Lens                  |
| 5. Built in Flash   | 12. Lens Cover            |
| 6. Self Timer Lamp  |                           |
| 7. Eyelet for strap |                           |

Figure 2. Back view of a digital (point and shoot) camera



1. Electronic Viewfinder
2. Speaker
3. Monitor Button
4. Zoom
5. Monitor
6. Playback Button
7. Button

8. Multi Selector
9. Delete
10. Button
11. Tripod Socket
12. Battery Chamber Cover
13. Battery chamber
14. Memory Card Slot

## Front of Camera

1. On/Off
  - Controls all operations of the camera
2. Shutter Release
  - Controls the capture of the photos
3. Mode Dial
  - Allows user to set some controls

### Mode Dial Scenes









 Portrait	 Landscape	 Night portrait
--	---	---

- Addit
- Additional scene settings may be controlled through the menu settings.

### Scene Menu Scenes

 Party/indoor	 Sports	 Backlight
 Beach/snow	 Close-up	 Panorama assist
 Sunset	 Museum	 Voice recording*
 Dusk/dawn	 Fireworks show	
 Night landscape	 Copy	

4. Microphone
  - Used for capturing voice and recordings
5. Built in Flash

 <b>AUTO</b>	Auto (default setting for  (auto) mode) Flash fires automatically when lighting is poor.
	Auto with red-eye reduction Reduces “red-eye” in portraits (  29).
	Off Flash will not fire even when lighting is poor.
	Fill flash Flash fires when a picture is taken. Use to “fill-in” (illuminate) shadows and backlit subjects.
	Slow sync <b>AUTO</b> (auto) is combined with slow shutter speed. Flash illuminates main subject; slow shutter speeds are used to capture background at night or under dim light.
	Rear-curtain sync Flash fires just before shutter closes, creating effect of a stream of light behind moving subjects.

6. Self Timer Lamp
  - Indicates that the self-time is set and blinks until one second before the picture is taken and will remain lit until the image is captured.
7. Eyelet for strap
  - Where the strap is connected to the camera.
8. Connector cover
9. Cable Connector
  - Connection for digital image downloading cable.
10. Power Connector Cover
11. Lens
12. Lens Cover
  - Opens and closes automatically on some models, but may have to manually remove the lens cover before turning the power on for some models to operate properly.

### **Back of camera**

1. Electronic Viewfinder
  - Used to frame images; especially when bright light makes the monitor hard to see.
2. Speaker
  - Allows you to hear the volume when playing audio and video back.
3. Monitor Button
  - Pushing switches between the monitor and electronic viewfinder.
4. Zoom
  - **T** (Telephoto) increases how much of the subject is in the frame.
  - **W** (Wide Angle) increases the area visible in the frame.
5. Monitor
  - Used in the place of the electronic viewfinder or to view images and videos captured on the digital camera.
6. Playback Button
  - Allows you to view images and other media captured using the camera.
7. OK Button
  - Allows you to accept changes via the multi selector and settings menu.
8. Multi Selector
  - Allows you to apply various settings including (flash and focus modes, timer, and exposure compensation). You can also make menu selections using the multi selector arrows.
9. Delete
  - Provided to remove images before transferring to a computer.
10. Menu Button
  - Provides all of the additional settings that can be navigated.
11. Tripod Socket
  - Area ready for tripod attachment.
12. Battery Chamber Cover
  - Cover for the battery storage area.
13. Battery chamber
  - Some cameras require special batteries. This camera requires AA batteries.

## 14. Memory Card Slot

- Where memory card is inserted or stored while camera is in use.

- How do we take pictures?

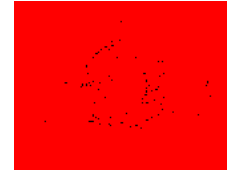
- The following information is also available as a handout.

### Steps and Key Points








#### Getting your camera ready

#### 1. Remove the lens cap if necessary and set the mode dial.

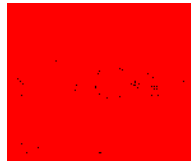
- For now students should use the automatic settings until they get use to taking photographs.



#### Available Functions in (Auto) Mode



In  (auto) mode, focus mode () 31) and exposure compensation () 32) can be applied and the camera can shoot using the flash mode () 28) and self-timer () 30). Pressing **MENU** displays the shooting menu options for specifying the image quality () 76) and image size () 77).

#### 2. Turn on the camera.



#### 3. Check the battery levels and number of exposures or images available to capture.

##### Battery Level

Monitor	Description
NO INDICATOR	Batteries fully charged.
	Batteries low; prepare to replace the batteries.
 Battery exhausted.	Cannot shoot. Replace with fresh batteries.



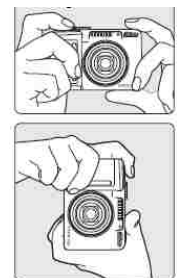
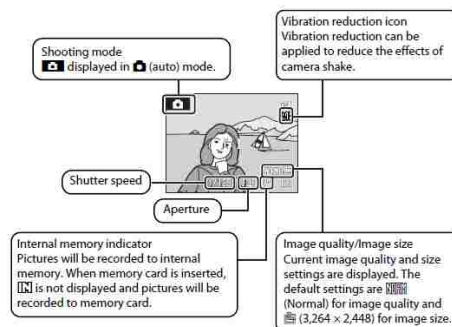
Number of exposures remaining

##### Number of Exposures Remaining

The number of pictures that can be stored depends on the capacity of the memory or memory card, image quality, and Image size () 78).

#### 4. Apply any necessary additional settings to ensure quality while taking photos.

##### Indicators Displayed in (Auto) Mode



#### Taking the photo

**1. Ready the camera including stabilizing the camera to minimize movement.**

- Hold the camera in both hands; do not obstruct the lens, flash, AF assist illuminator and/or microphone.
- Make sure the flash is up when shooting “tall” or portrait orientation.
- Use the viewfinder for all photo’s- not the display monitor. Holding the camera near your face with your arms tucked to your sides will help with stabilization.
  - i. If you cannot take the photo with your arms tucked to your body, find something to lean against. A fence post, a table, etc.

**2. Frame the picture. Decide where your subject will be and what else will be in the photo.**



**3. Press the shutter release button half way to automatically focus the camera.**



**4. Depress the shutter release button the rest of the way down to capture the image.**

**Summary/Review:**

There are two types of cameras: Film/Analog and Digital

The main differences between the two are the way that they process photos.

- Let’s go back over the parts of a camera.
  - (Refer to handout)
- Give students a blank handout and let them fill parts in.
  - Conduct as a quiz. You can have them do individually (10 minutes) or in groups (5 minutes). After a few minutes go back over the parts and help students remember the parts they did not get (5 minutes).
- There are many steps to follow in order to get ready to take your photo.
  - What is the very first step?
    - Take off the lens cover!
  - Why do you think that we need to stabilize our cameras?
    - The main reason is for clarity in our pictures, the more stable we are or our camera is, the less blur there will be in our photos.

**Preview tomorrow's lesson:**

Now that students have learned the parts of our camera and what those parts do, tomorrow they will begin to go over how to compose great photographs.



## Photography Lesson Two: Photo Composition

### Materials List:

- PowerPoint
- Handouts
- Pictures

**Situation:** Introduction to Agricultural Communications

### Objectives:

- List the elements of photo composition on a quiz with 85% accuracy.
- Identify the composition elements in a photo with 80% accuracy.

### Key Terms:

- Composition
- Simplicity
- Subject-background relationship
- Framing
- Angles
- Rule of thirds
- Symmetry
- Lines

### Interest Approach:

Do the students in your class perceive the photos they take as “quality”, meaning do they think they do a good job, or do they not like the way their photos look after processing?

Have students look at pictures (available in the PowerPoint that goes with this lesson) and pick out the ones they perceive as quality. (Use *composition worksheet*)

Note: Some students may have an eye for picking out great photos and some may not pick up on it right away.

### Reasons to Learn:

- Why should we worry about making our pictures look good?
- Why is photo composition important?

### Questions to Answer:

- What is composition?
- What are the elements of composition?
- How can you incorporate elements of composition as you shoot photos?

## Answers to Questions:

- What is composition?
  - The subject and elements of a photograph create interest and appeal to those viewing the image.
  - You learn by taking photographs, studying photographs and taking more photographs until composition becomes second nature.
  
- What are the elements of composition? *Note: There are images and descriptions for each of the following rules in the PPT that have been prepared for this lesson.*
  - Six elements of composition
    - Simplicity
    - Subject-background relationship
    - Framing
    - Rule of thirds
    - Centering and symmetry
    - Line(s)
  
  - Simplicity
    - The simplicity rule means keeping the items in your photo relatively simple. If your main subject is close to the lens, then your background should be simple (free from distracting objects, colors, etc.) in order to avoid distractions. Another good idea is to avoid objects or lines that lead the eye away from your main subject.
  
  - Subject-Background Relationships
    - In the final print, the background will be as much a part of the image as the subject.
    - Train yourself to look past your subject in the viewfinder to study the background
      - Fill the frame
        - You only have one point of interest in a photo, so fill the frame with that subject
        - **Ask your students to:**
          - Q1: Identify which image has the greatest impact.
            - A1: The image on the right has the most impact.
          - Q2: What is it about the image on the right that creates more impact?
            - A2: You can tell something about her mood because you actually see her expression and body language, she appears happy and you can tell she is exploring the water.

- Depth of field
  - The amount of the image that is in sharp focus. (makes the background blurry)
- Tonal and color relationships
  - Contrasts exist among photo elements based on the tones (light/dark) and colors (cold/warm).
  - Set the mood
  - Tonal in black & white photos:
    - Interactions of light and dark within a photo
  - Color: Opposite color characteristics contrast
    - Cold: bluish
    - Warm: reddish
    - Light: more white
    - Dark: more black
    - Bold: dominant
    - Weak: subtle
    - Cold and warm
    - Light and dark
    - Bold and weak
- Framing
  - The framing rule: using natural surroundings mindfully can add more meaning and focus to your subject. The surroundings can be any natural object that can be used to create a frame around your subject (bushes, windows, trees or even a doorway). When using this rule be sure to focus on the main subject and not on the surroundings that are framing it.
- Rule of Thirds
  - If you were to fold a photograph in thirds both vertically and horizontally when you unfold the photo, you can see four (4) points of intersection. These points constitute the strongest visual anchors of an image.  
*Note: You can fold a piece of paper and illustrate this for the students.*
  - Rectangular frame divided into thirds horizontally and vertically with four points located where the lines intersect.
  - The theory is that if you place points of interest in the intersections or along the lines that your photo becomes more balanced and will enable a viewer of the image to interact with it more naturally. Studies have shown that when viewing images that people's eyes usually go to one of the intersection points most naturally rather than the center of the shot – using the rule of thirds works with this natural way of viewing an image rather than working against it.
  - The rule of thirds works well with asymmetrical subjects.
- Centering/Symmetry

- What is symmetry?
      - Symmetry is when one shape becomes exactly like another if you flip, slide or turn it.
      - Symmetrical images can be centered.
      - The simplest type of symmetry is "reflection" (or "mirror").
  - Line(s)
    - The leading lines rule can be used to direct the eye deeper into a photo and commonly to the main subject. Line(s), often called leading lines, can lure the eye to a subject by leading to it from any side or depth of the photo. Leading lines could be roads, rivers, tree branches or even bridges. They can provide a visual backbone that helps structure the rest of the photograph.
- How can you incorporate elements of composition as you shoot photos?
  - Be creative.
  - Think outside the box.
  - Look at objects you may otherwise overlook.
  - Try to take photos from unique angles.
  - Look at images from a different point of view...some people may be shorter than you or taller than you and see things differently.
  - Capture your subject in action do not wait for them to be still.
- Some advice...
  - Take lots of pictures and have fun!
  - Feel free to bend the rules.

### **Summary/Review:**

Go back over the images from the beginning of class. Give each student a new blank worksheet, like the one used in the interest approach. After going back through the photos and giving students a chance to make new notes, let students discuss the elements used or not used in the photos.

Remember: While all the elements are important in photography, they may not all be used in a single photo. You may have a theme for a photo that has great *angle* but may not exhibit the best *rule of thirds*.

## **Photography Lesson Three: Do's and Don'ts of Photo Editing/ Photo Manipulation**

### **Materials List:**

- PowerPoint
- Handouts
- Pictures

### **Situation:** Introduction to Agricultural Communications

This lesson should be taught in a computer lab and you should plan on this taking two days. It is possible to be finished in one, but computers should be available for two, just in case. A lecture style classroom would make this lesson difficult to comprehend. You should use Adobe Photoshop software, the industry adopted manipulation software, to complete each of these tasks if it is available. Trial version downloads for Adobe Photoshop is available from [www.adobe.com](http://www.adobe.com) if your school will permit them to be downloaded for teaching this lesson. If not, you can try "GIMP" free photo editing software. It can be accessed by downloading it to your computer. Available at [www.gimp.org](http://www.gimp.org)

The four images that the students review for the interest approach are saved in your lesson resources folder. Load the photos onto each student's computer prior to the lesson. Have the students make the necessary corrections to each image. The needed corrections are listed in the PPT notes for each of the image slides.

### **Objectives:**

- Perform basic manipulation tasks in photo editing software with 85% accuracy.

### **Key Terms:**

- Photo manipulation
- JPEG
- PNG
- Lossy
- Lossless
- CMYK
- RGB
- Cropping
- Red Eye

### **Interest Approach:**

- Show the students four photos with common problems which are in need of manipulation.
- Ask them if there are minor changes to be made, and if there is a way to make the changes. Some students may have a background with editing software such as Photoshop but some may not. Showing them these photos will get them thinking about ways to change a photo.

Each photo contains notes about the major element that should be corrected.

### Reasons to Learn:

- Why should we make a good photo a great photo?
- Why should we fix minor mistakes in our photos?

### Questions to Answer:

- What is photo manipulation?
- What kind of files should we use?
- What are the main, or basic tools in photo correction software that we should use?

### Answers to Questions:

- What is photo manipulation?
  - It is critical for you to use high quality images to illustrate what you are communicating!
  - Photo manipulation allows you to fix MINOR mistakes in your photo without changing the context.
  - A picture is worth a “thousand words”!
- Photo Compression
  - Two Types:
    - Lossless – When compressed (saved) or decompressed (opened) the image loses none of its information.
    - Lossy – Removes some of the original photographic detail when compressed or decompressed.
      - Used to reduce image size with photo storage.
- File formats to use...
  - JPG - Joint Photographic Experts Group, compressed format
  - TIF - Tagged Image File Format, uncompressed and compressed formats
  - PNG - Portable Network Graphics, standardized compression
  - GIF - Graphics Interchange Format, compressed format dating back to CompuServe in the 1980s
  - Each file format has certain properties that make it different from another format.
- Photoshop File Management
  - Always save downloaded images and Adobe Photoshop (PSD files) in a raw images folder.
  - Then create a new folder for manipulated photos.
  - With certain file formats, some photo information and details are lost each time you save.
  - The higher the image resolution the better the file quality.
- Helpful Image Properties
  - Color mode: Image>Mode>CMYK or RGB  
*Refer to PowerPoint for illustration*
    - **Cyan, Magenta, Yellow and Black**

- **Red, Green, Blue**
  - The mode you use will depend on the printing options you have.
  - Most digital images are saved as RGB automatically.
  - Monitors display in RGB; while printing services would offer CMYK.
  - This can cause differences in the appearance between what you see on screen and your printed image.
- **Image Size and Resolution**
  - Will determine the quality of the image
    - Measured in dots per inch (dpi) or pixels per inch (ppi)
      - Web resolution is 72 dpi
      - Common print resolution is 300 dpi
      - Publication quality is 600 dpi or better
  - To see an image size and resolution: Image>Image Size
- **Journalistic Rules for Photo Manipulation**
  - Cropping
  - Sizing and levels with resolution
  - Red Eye Removal
  - Adjustment of levels to histogram limits
  - Minor color correction
  - Adjustment of under and over exposed photos
  - Eye dropper to check/set gray or white
  - Healing tool to remove time stamps, logos, etc

*Note: The PowerPoint provided for this lesson includes screen captures and images of the tool icons.*

- **Photo Cropping**
  - Choose an image to crop
  - Click on the **Crop** icon in the tool bar at the right of your screen or use keyboard shortcut (Ctrl+C)
  - Draw your crop tool on the photo while holding the **left button** on your mouse.
  - Remember – the image in the crop box is what you are choosing to keep. Dark areas will be removed.
  - When done hit **Enter** or right click and select crop or double click.
  - To crop to a certain size, enter the dimensions you want at the top of the toolbar
  - The cropping tool will then automatically crop to this size format
  - A before/after example is included in the PowerPoint.
  - *Activity: Now let students work to crop image 1. Give them only a few minutes for this task.*
- **How To Resize Images and Maintain Original Sharpness**
  - When taking photos, use a medium to large image (10 to 18 inches).

*So what do you do when you have a large photo, but you need it much smaller?*

  - Follow these specific steps to avoid blurry photographs.
  - Resize Images.

- Open one of your photographs.
  - Go to the **Image > Image Size**.
  - Click on **Resample Image** and choose **Bicubic Sharpener** from the drop-down menu. (This is the best setting for making sure that an image doesn't blur.)
  - Adjust your image pixels or size (try 250 pixels) or change to photo to a specific size.
  - For enlarging an image select Bicubic Smoother.
  - When resizing photos try to do it only once on an image. If this is not possible, then enlarge or compress your photo in about 10% increments.
- **Red Eye Removal**
    - Select **Red Eye** tool.
    - Zoom in on red eye.
    - Center Red Eye tool and click.
    - Make adjustments as needed for pupil size and darken amount.
- **Levels and Histograms for Color Correction**
    - Layer > New Adjustment Layer > Levels
    - Can click “Auto” or can use drop down color box to correct each color
      - If you do each color, “Drive the truck to the mountain”
        - Meaning move the histogram markers until they hit the slope of the histogram.
    - Select white eyedropper tool to set white balance
      - Click on true white in photo
- **Color Correction**
    - Image> Adjustments> Hue/Saturation
    - Choose color you want corrected from drop-down box
    - Adjust color saturation
- **How To Fix An Underexposed Photo**
    - The easiest way to avoid underexposed photos is to adjust your aperture settings, your shutter speed and your film speed when shooting. Use your camera manual to learn more about these settings
    - Choose a dark or underexposed image.
    - **Click on Image > Adjustments> Shadow/Highlight**
    - Play with the **Amount Slider** and the **Tonal Width Slider** until you find just the right balance.
- **How To Fix Overexposed Images**
    - Choose a washed-out or overexposed image.
    - **Click on Image > Adjustments > Shadow/Highlight**
    - Play with the **Amount Slider** and the **Tonal Width Slider** until you find the right balance.
- **Spot Healing Brush Tool**



- Use this tool to remove time stamps, logos, etc.
- Click the Spot Healing Brush tool
- **Ctrl+Click** on the area you want to copy
- Click on the area you want to erase
- Repeat

**Summary/Review:**

- You know a bit more about file types and how to manipulate photographs, but remember do not change the context of your photos.
- Photo ethics are an important part of photojournalism.
- With the remaining time in class, experiment with the tools you have learned today.
- There are additional tools, such as text, the lasso tool, and the magic eraser tool that you may also take to time to find and experiment with.

## Photography Lesson Four: Preparing Photo Captions

### Materials List:

- PowerPoint
- Handouts
- Pictures

**Situation:** Introduction to Agricultural Communications

### Objectives:

- Analyze photo captions on a quiz with 90% accuracy.

### Key Terms:

- Photo caption
- Conversational language

### Interest Approach:

*From the NY TIMES*

Use the image provided on slide 2 to begin this lesson. Have students work in groups of no more than 3. Their job will be to write comments/answers on a sheet of paper answering the three questions listed below. Although working in groups each student must have an answer represented.

1. Make a personal connection to the photo. (E.g., “Reminds me of when I visited the Empire State Building in third grade.”)
2. Write a question the photo brings to mind. (E.g., “Why can you see only the backs of people’s heads in this shot?”)
3. Make a guess as to what information the original caption of this photo imparted. (E.g., “This looks like the dedication of a memorial to someone who died.”)

Have the students discuss all the thoughts provoked by the image and questions that they posed. Finally, read the captions you removed originally. Does the caption reveal anything new about the photo? Do the students feel differently now that they have read the caption? Did any of the students get all the information correct before seeing the caption?

### Reasons to Learn:

- Why do we need to write captions for our photos?

### Questions to Answer:

- What is a photo caption?
- What is the purpose of a photo caption?
- What are the important steps to good caption writing?
  - What are the elements of a good caption?

## Answers to Questions:

- What is a photo caption?
  - A short sentence or two that describes a photograph or illustration within a page layout.
  - Also called a cutline.
  
- Why do we have photo captions?
  - Photo captions are an integral part of storytelling, but they are often the most underdeveloped element in the mix of words, graphics, and photographs.
  - Captions are second only to headlines as the most read copy in newspapers and other media.
  - A poorly executed caption can destroy the message of a photo.
  - The reader/viewer expects nothing less than accurate, complete, and informative information, including captions.
  
- Reader Behavior
  - Reader looks briefly at the photo.
  - Subtle aspects of the photo may not be recognizable by the general public.
  - When interest is sparked the reader will typically look for the photo explanation (caption/ cutline).
  - After reading the caption the reader goes back to the photo for a second look.
  
- How do you write a good caption?
  - What are the elements of a good caption?
  - Include the main elements.
  - AP Style suggests identifying
    - *Who, What, Where, When, Why, How*
    - Who is that?
      - (And, in most cases, identify people from left to right unless the action in the photograph demands otherwise.)
    - What is going on?
    - Where and when was this?
    - Why is this important or significant?
    - How did this occur?
  - Writing the caption
    - First Sentence: Who and What, Where and When!
    - Who and What the photo shows (in present tense)
    - Where and When of the photo
    - Second Sentence: Why and/or How (only if needed)
    - Why... is the photo significant
    - AND/OR
    - How: Gives the background on the event

- Example of a standard AP Caption (also in PowerPoint):
  - The Mississippi River flows through a hole in the Sny Island, Ill., levee, flooding farmland and homes 10 miles south of Quincy, Ill., Sunday, July 25, 1993. About 2,000 people were evacuated from the 44,000 acres that flooded. (AP Photo/Bill Waugh)
  
- *Activity*: Read the following captions and determine if the caption is good, okay or poor based on AP style.
  - Have students use the provided caption rating sheet. Give them about 3 minutes to rate each caption. Discuss each caption with them as soon as they finish and have them identify what is correct or incorrect based on AP style. Please recognize that the rating will appear for each caption on click. Also emphasize the AP elements present or missing.
    - Proceed to show additional captions in PPT.
  
- Hot Tips
  - Check the facts. Be accurate!
  - Don't assume.
    - Ask questions in your effort to inform and be specific.
    - Be willing to contact and include the subject.
    - Be sure to ask for correct spelling of names when shooting people's faces.
  - Avoid stating the obvious.
  - "Dennis Rodman smiles as he kicks a broadcast photographer in the groin." (Provide useful information.)
  - Always identify the main people in the photograph. EXCEPT when faces are not really visible.
  - Use present tense when possible.
  - Don't try to be humorous when the picture is not.
  - Use commas to set off directions from the captions to the picture.
    - "George Wardlow, above,... "or
    - "Casandra Cox, upper left,..."
  - Conversational language works best.
    - Writing as if talking to someone while still using proper grammar.
    - Don't use clichés.
    - Write the caption as if you're telling a family member a story.
  - Avoid making judgments.
    - "An unhappy citizen watches the protest..."
    - If you must be judgmental, be sure you seek the truth.
  - Avoid using terms like "is shown, is pictured, and looks on."
  - Include dates for historic or file photos.
    - Mayor David Dinkins, 1993.

- Go through some of the additional examples provided in the PPT.

**Summary/Review:**

Captions are a photographer's chance to explain their focus and reasoning for the photo.

We have provided caption -writing worksheets. Break students into groups (you may use as many or as few groups as you choose) and assign a different photo/story to each group. Give each student in the group a worksheet. Have each student individually complete a worksheet by answering the questions and writing a photo caption. They may work in groups, but each student must turn in an assignment.

*If time permits:* Have the students compare captions among their group members. Use the captions provided in the PPT from the original source and lead students through a review. Grade this assignment for accuracy.

*If you are out of time:* Have students complete the worksheet and turn it in. Review the parts of a caption out loud before the bell rings.

## **Writing**

## Writing Lesson One: Introduction to Journalistic Writing

### Materials List:

- PowerPoint
- Handouts

**Situation:** Introduction to Agricultural Communications

### Objectives:

- Identify the 5 W's and the H of three leads for news stories with 90% accuracy.
- Utilize the Associated Press (AP) Editing marks on a quiz with 90% accuracy.
- Recognize the inverted pyramid on a quiz with 95% accuracy.
- Explain the importance of using the inverted pyramid on a quiz with 85% accuracy.

### Key Terms:

- AP Style
- News Story
- Feature Story
- Conversational Tone

### Interest Approach:

Have you watched the news or read the newspaper lately? Are the stories similar? Can you see patterns in news stories and how they are told or written?

### Reasons to Learn:

- Why should we write news stories?
- Why do we need to inform people?
- Why do we need to educate people?
- Why do we need to communicate?

### Questions to Answer:

- What are the different types of journalistic stories?
- What is the writing style used by journalists?
- What is the structure news stories follow?

### Answers to Questions:

- **Types of journalistic writing**
  - *News*
    - Hard
      - Presents time sensitive, factual information
        - Usually addresses specific events or situations
  - *Feature*
    - Presents less time sensitive, factual information, more creative.
      - Usually about people or activities, but not tied to people

- **Writing Style**
    - AP Style
      - Abbreviation for the Associated Press
        - Also, the style used by mass media.
      - Indicates the style accepted and used by journalists
        - Provides rules and guidelines for writing
- Note: There is a handout and worksheet for students to complete at this time. The handout has all the rules for them to use in order to complete the worksheet.
- **News values – 3 primary characteristics**
  - *Relevance*
    - Importance to audience
  - *Usefulness*
    - Provides information that can influence audience members' lives
  - *Interest*
    - Can be a combination of relevance and usefulness or it can be simply interesting
- **Writing News Stories**
  - Agricultural journalists should:
    - Be able to recognize newsworthy facts & ideas
    - Recognize the needs of audience and location
    - Have the ability to combine them into interesting, readable news stories
- **News Writing: Structure**
  - Main Characteristics
    - Timeliness
      - Hard news stories are time-sensitive
    - More fact focused
      - Details are straightforward and not focused on personal appeal
        - Tells the important information first
    - Never use contractions in a news story.
    - Also, do not use clichés or slang.
- **News Story Structure**
  - Contains a lead
    - Introductory statement
    - Contains the most important information
      - Who, What, Where, When, Why, and How
      - Sometimes spelled **lede**
      - First paragraph of a news story
      - Usually 1 sentence or 2 short sentences
      - Use as many of the 5 W's and H as possible.
      - Hooks the reader into the story (grabs them).
      - Make every word count.
- **5Ws and the H**
  - WHO?
    - Is the person ...



- widely known?
    - prominent nationally?
    - in a position of authority or importance?
    - exceptionally interesting?
  - Also applies to groups and organizations
- WHAT?
  - If the event, idea or situation has greater significance or is more important than the people involved.
  - Or, if too many people are involved.
- WHEN?
  - Only if the time is of extreme importance
- WHY?
  - The reason something was done...
    - lots of human interest
    - is clear
    - has some special significance
- HOW?
  - If something was ...
    - done in an unusual or interesting manner.
    - has never been done before
    - of significant human interest
- **Inverted Pyramid**
  - Format used for writing the story
    - Most important information is present first.
    - Least important information is presented last
  - Why use the inverted pyramid?
    - Submitting stories to a newspaper.
      - An editor may cut your story!
    - You want to have all the important information first to ensure the story will still makes sense if part of it gets cut.
    - Example
      - You write a 350 word story. The editor only has room for 200 words. He/she will cut the end of the story to make it fit.
      - By using the inverted pyramid, all the important information SHOULD still be in the story.
      - Additional information follows.
  - Inverted Pyramid
    - Format used for writing the story
      - Most important information is presented first
      - Least important information is presented last
      - *See slide #17 for illustration*

**Summary/Review:**

Click through the slides at the end of the PPT. This will let the students identify the 5W's and the H of the news story leads. Also have students finish any work not completed on the AP style quiz.

Important things to remember:

- Know your audience!
- Go searching for the 5W's and the H as they apply to the audience.
- Check, Check and Double Check...spelling and pronunciation of everything, especially names.

## Writing Lesson Two: Feature Stories

**Situation:** Introduction to Agricultural Communication

### Objectives:

- Write a feature lead on a daily quiz with 95% accuracy.
- Identify the story structure of a lead on a test with 80% accuracy.

### Interest Approach:

On slide 2 of the PowerPoint, a story is displayed. Students should read part of the story and determine if it is a news story. They recently learned about news stories and are now moving on to feature stories. Since the story does not fit the criteria or follow the structure, the students should determine that the story is not news.

### Reasons to Learn:

- Why are feature stories important?
- Why are features different from news?

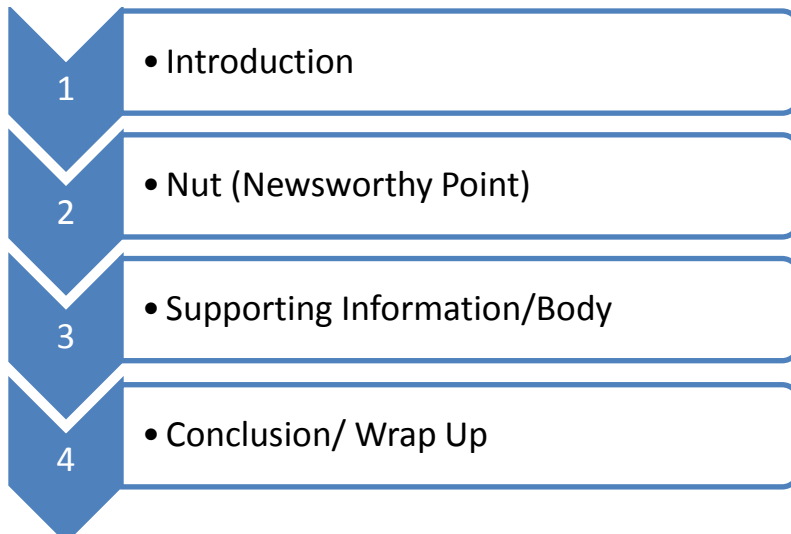
### Questions to Answer:

- What is a feature story?
- What are the parts of a feature story?
- What are some important ideas to remember about writing a feature story?

### Answers to Questions:

- What is a feature story?
  - Longer “shelf life” than a news story
    - Can be published later and still retain a high level of audience interest
      - Not as time sensitive
  - Rely more on human interest compared to news stories
- What are the parts/structure of a feature story?
  - *Writing the Lead*
    - A summary may not be the best lead
    - A lead block of one or two paragraphs often begins a feature
    - Rather than put the news elements of the story in the lead, the feature writer uses the first two or three paragraphs to set a mood, to arouse readers, to invite them inside
  - *Types of feature leads*
    - Big Fact – 1 or 2 big facts in a short, snappy, astonishing or explosive statements
    - Question – arouse interest without a definite answer from the reader
    - Suspended Interest – create question(s) in the reader’s mind (climax or answer comes later)
    - Direct Address – Speak directly to the readers to attract and build interest (“You”)

- Quotation – direct or indirect quotes from an identified source (when and where usually later)
- *Nut Graph*
  - The “So What” paragraph
  - Usually in the third or fourth paragraph
  - Explains the reason the story is being written
- *Body of the Feature*
  - Provides vital information while it educates, entertains, and emotionally ties an audience to the subject
  - Important components include:
    - Background information
    - The “thread” of the story
    - Dialogue
    - Voice
- *Background Information*
  - A paragraph or two of background should be placed high in the story to bring the audience up-to-date
- *The “Thread” of the Story*
  - Connect the beginning, body and conclusion of the story
    - Because a feature generally runs longer than a news story, it is effective to weave a thread throughout the story, which connects the lead to the body and to the conclusion
    - This thread can be a single person, and event or a thing, and it usually highlights the theme
- *Dialogue*
  - May be used to keep a story moving
  - In feature reporting, it must be accurate (do not let your opinions in!)
  - Can give readers strong mental images and keep them attached to the writing and to the story’s key players
- *Establish a Voice*
  - The “signature” or personal style of each writer
  - Voice is the personality of the writer and can be used to inject color, tone, and subtle emotional commentary into the story.
  - Voice should be used subtly
- *Wrapping it Up*
  - The ending will wrap up the story and come back to the lead, often with a quotation or a surprising climax.
  - Often, a feature ends where the lead started, with a single person or event.
- *Feature Writing*
  - Does not have to be written in the inverted pyramid format
  - Written to hook the reader and draw them into the story.
  - A chronological, logical or narrative pattern of organization is used (block style) instead of the inverted pyramid.



- *Observations*
  - Feature stories allow you to integrate details that are observed...not just spoken
  - Sprinkle direct quotations, observations and additional background throughout the story
- *Choosing the Theme*
  - Has the story been done before?
  - Is the story of interest to the audience?
  - Does the story have holding power (emotional appeal)?
  - What makes the story worthy of being reported?
  - The theme answers the question. “So what?”
- *Things to remember*
  - The final paragraph should complete the story.
    - The best ways to do this are to refer back to the lead or use a quote to refer to the future.
  - The story should reflect the subject's **character and personality**.
  - Write creatively, use color and imagination, and make people come ALIVE with your feature writing.
  - Unlike in standard news writing, contractions may be used to give an informal tone.
  - *If the journalist were writing a news story, it might begin something like this: Example on Slide 19 of Feature PowerPoint*
  - *If this were to be written as a feature story, however, the lead might look more like this: Example on Slide 20 of Feature PowerPoint*
- Stories for Broadcast
  - News OR Feature
    - Broadcast stories can be both news or feature.
    - The video projects you complete will most likely be features.
    - Presents information in a manner that is more conversational
    - May focus on events, situations, people or activities

- Depends upon the audience
- Using a conversational tone
  - Useful in all of the types of writing.
  - Be careful not to distract your audience with too much language, long sentences, and clichés.
    - You will distract your audience if you are not grammatically correct or mispronounce names, etc.
    - Make sure you use the words in the correct way.
      - Some words are spelled the same way but have different meanings.
        - Be specific when using these types of words.
      - Example: **Bass** drum and a **bass** fish.
  - Remember your goal is to tell a story to someone who knows less about what is happening than you do.
  - Broadcast is less formal than print, but more formal than how we speak.
  - Do not try to be superior (don't treat your audience as if they are dumb!)

**Summary/Review:**

Students should now be able to determine the difference between news and feature writing. Spend some time making sure they understand the structure. If newspapers are available, give each student a paper and let them analyze the stories and the leads of those stories.

## **Videography**

## **Videography Lesson One: Production Process: From start to finish.**

### **Materials List:**

- PowerPoint
- Handouts

**Situation:** Introduction to Agricultural Communications

### **Objectives:**

- Students develop an understanding of the process for shooting a video with 100% accuracy.
- Students identify different roles in the film crew with 90% accuracy.
- Students produce a written process for their video production with 85% accuracy.

### **Key Terms:**

- Pre-production
- Production
- Post-production
- Film crew

### **Interest Approach:**

Introduce students to the video they will be creating for the project.

### **Reasons to Learn:**

- Why is there a process to follow when shooting a video?
- Why are there different roles to fill?
- Why do students need to know the parts of a video camera?

### **Questions to Answer:**

- What does it take to create a video?
- What roles/responsibilities are there in creating a video?

### **Answers to Questions:**

- *What steps or phases would you go through to create a video about agriculture?*
  - From start to finish:
    - Phases
      - Pre-production, Production, Post-production
- *Pre-production includes:*
  - Research
  - Scripting/storyboarding
  - Graphic/audio/video clips

### **Steps**

1. Choose crew, brainstorm ideas, plan theme/sets/props/costumes.



- A film crew is a group of people who produce a film or motion picture. Members will have different specialty areas. (Handout available)
2. Do research, write script, create storyboard, and create signage.

**Here are the film crew roles. Each student will need to have a role within their group. The roles with an asterisk (\*) next to them are roles that must be filled. If additional students are in the group more roles may be filled.**

**\*Director**

- Responsible for overseeing the creative aspects of a film.
- This role includes controlling the content and flow of the film's plot, directing the actors, organizing and selecting filming locations, and managing technical details.

**\*Production Manager/Coordinator**

- Supervises the physical aspects of the production (not the creative aspects) .
- Including personnel, technology, budget, and scheduling.
- She/he is the information nexus of the production, responsible for organizing all the logistics.

**\*Script Supervisor**

- Also known as the “continuity person”
- She/he makes notes on every shot, and keeps track of props, blocking, and other details to ensure continuity from shot to shot and scene to scene.
- Notes are given to the Editor to expedite the editing process.

**\*Director of Photography**

- She/he is the chief of the camera and lighting crew of the film.
- This person makes decisions on lighting and framing of scenes in conjunction with the film's director.

**Post-production supervisor**

- This person is responsible for the post production process.
- Not a creative role, but is important.

**Production Designer**

- Responsible for creating the physical, visual appearance of the film settings, costumes, properties, character makeup, all taken as a unit.

**Production Sound Mixer**

- This person would be head of the sound department on set, responsible for recording all sound during filming.

**Film Editor**

- Film editor assembles the various shots into a coherent film with the help of the director.

**Visual Effects Supervisor**

- Visual effects refer to post-production alterations to the film's images.

**Set Decorator**

- In charge of the decorating of a film set which includes the furnishings and all the other objects that will be seen in the film.

**Props Master**

- Prop master is in charge of finding and managing all the props which appear in the film.

**Costume Designer**

- The costume designer is responsible for all the clothing and costumes worn by all the actors that appear on screen.

## **Production**

### **This phase includes:**

- Camera
- Sound
- Talent
- Transitions
- Videotaping

### **Steps**

1. Direct, rehearse talent, arrange set, lights, sound.
2. Action! Broadcast/videotaping.

### **Production Tips**

- Practice with the equipment and play your video back to ensure that the equipment is functioning properly.
- Editing cannot correct filming errors, so re-do the shot immediately.
- Keep your shot list handy during filming.
- Create a log for the video you capture.
- Good shots or important information.
- This will make post-production easier.
- Use the video techniques previously presented.

### **Errors that cannot be corrected**

- Bad sound
- Out of focus shots
- Having a date on everything you recorded (time-stamp)
- Unsteady camera work

## **Post-production includes:**

Post production is time for the film crew to review and edit all material.

### **Steps**

1. Create camera log; obtain extra shots/dubs, graphics, sounds.
2. Edit video.

### **Editing involves:**

- Combining the video, transitions, and music in a way that presents your message to your audience in a creative and effective way.
- Using Software
  - You will use Adobe Premiere Pro to edit this project.
  - An industry standard software program, meaning this is what professional videographers use.

- Using the software you can import your video footage, make edits, add effects, and export in a format that is viewable by others.

### **Post-Production Editing Tips**

- Make movie settings fit the output device.
- Remove any clips that do not add to the message.
  - Mistakes.
  - Pauses.
  - Footage that is good but does not support the message
- Crop wisely

### **Summary/Review:**

There are 3 main phases in the production process.

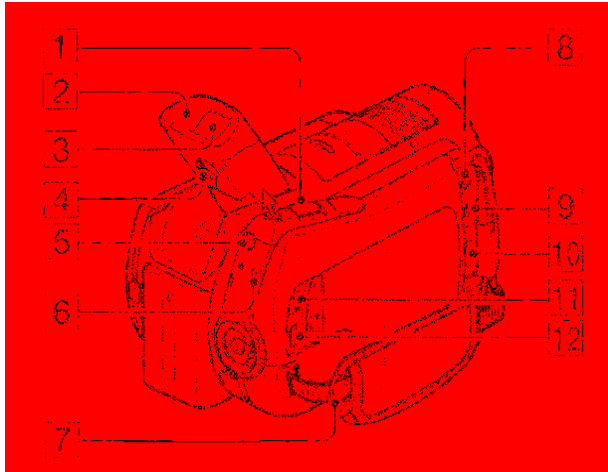
- Pre-production, production, and post-production.
  - **Pre production**
    - Get your ideas together; organize all details with your group.
  - **Production**
    - Larry the Cable Guy: “Git R Done!”
    - This is when all the great ideas get put into action. Take shots, interview people, etc.
  - **Post-Production**
    - Review all that you have done and edit your material!

**Also cover:**

### **Parts of a Video Camera**

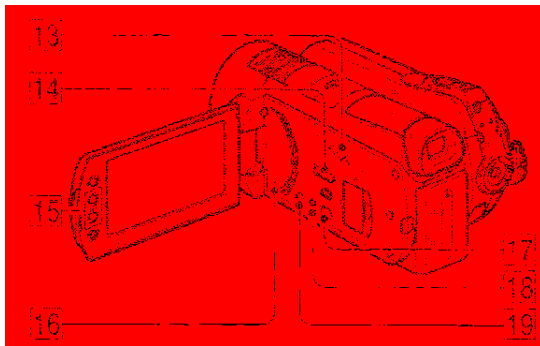
- What are the parts of a video camera?
  - Identification of the parts of a camera is critical for students to understand all operations that could be performed. A typical hand-held video camera is displayed in the figures below. Figure 1 depicts commonly used major components found on the right side of the video camera normally used when setting up for recording (#1-12). Figure 2 depicts commonly used controls during recording and for alternate settings (13-19). Figure 3 depicts parts of the video camera used for sound and lighting (20-24)

**Figure 1**



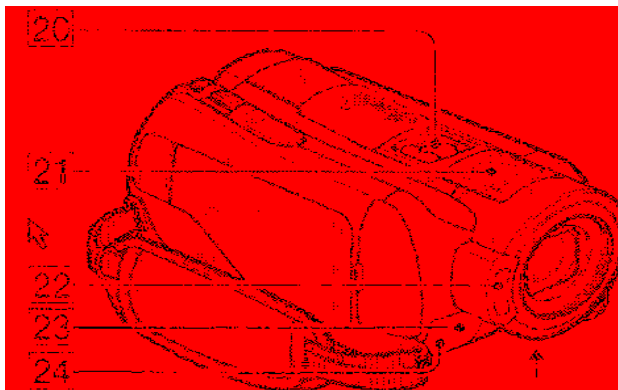
1. Power Zoom Lever
2. Eyecup
3. Viewfinder
4. Viewfinder Lens Adjustment Lever
5. QUICK ON Button
6. ACCESS lamp (Hard Disk)
7. Hook for a Shoulder Belt
8. MIC Plug in
9. Headphones Jack
10. HDMI Out (mini) jack
11. A/V Remote Connector/ A/V Out Jack

**Figure 2**



12. USB Jack
13. Speaker
14. Night shot Switch
15. Zoom Buttons
16. Reset Button
17. Disc Burn
18. EASY button
19. DISO/BATT INFO button

**Figure 3**



20. Active Interface Shoe
21. Built-in Microphone
22. Flash
23. Remote Sensor/Infrared port
24. Camera Recording Lamp

**In order to complete the project students will need to have a basic understanding of the parts of a video camera. A worksheet is available for the parts of the video camera similar to the one provided in the photography lessons.**

## **Videography Lesson Two: Techniques for Shooting**

This lesson can be taught two ways.

1. Using the lesson plan and supporting PowerPoint presentation.
2. Using the lesson plan and handouts, plus the worksheet.
  - a. The handouts will allow students to read through the material alone and use the information as a reference later in the project.
  - b. Also there are four videos provided in the electronic files that would enhance the material. They are numbered to 1-4 to match up with the order the material is covered in the handouts.

### **Materials List:**

- PowerPoint
- Handouts
- Pictures

**Situation:** Introduction to Agricultural Communications

### **Objectives:**

- Students can locate parts of a video camera on a worksheet with 90% accuracy.
- Students discuss techniques for shooting video in class with 80% accuracy.

### **Key Terms:**

- Pan
- Tilt
- Zoom
- Iris (Exposure)
- White balance
- Shutter
- Audio

### **Interest Approach:**

Show students the video and have them think about what took place behind the scenes from the start to the finished video they are watching. Was the video well done? If so, what made it have impact? If not, what could have been improved or changed?

Posing these questions will frame the broadcast unit and get them to thinking about video beyond the finished product.

### **Reasons to Learn:**

- Why do techniques for shooting need to be discussed?

### **Questions to Answer:**

- What are some basic techniques that will help students shoot their first video?

## **Answers to Questions:**

### *Techniques for Shooting*

*Cutting down camera shake*-A shaky camera can be distracting and cause shots to be blurred. Always stabilize the camera as much as possible when shooting. Here are some steps to take to reduce camera shake.

- When possible use a tri-pod.
  - Without a tri-pod video has a tendency to be shaky.
- Brace the camera between you and a wall or something sturdy.
- Turn a chair around backwards, sit and use the back of the chair as support.
- Sit on your heels and rest your arms on your knees.
- Balance the camera on your shoulder.
- Stand with your feet shoulder width apart and keep your elbows close to your body.
- Use a wide angle focal length to shoot handheld shoots. (It doesn't show shaking as much.)
- Before starting to film take a deep breath let half out then hold the rest until finished with the shot.
- Breathe shallow breaths for longer shots.
- Photograph moving objects (it's less obvious).
- If they step with their right foot so should you.
- Reverse your feet from theirs if you're walking backwards.

*Using the zoom*-The zoom tool can be very beneficial for putting into focus exactly what you want your viewer to focus on.

- Be careful not to bump the camera as you reach for the zoom.
- Be careful of hard stops and starts. (So when you have zoomed all the way in or all the way out)
- Usually zoom is used to reveal something new in the scene.
- Try to only use zoom when you have to.
- Make your zooms (focusing in or out on an object) and pans (moving horizontally) so smooth that your audience is not even aware you're doing it.
- As your subject starts to move start zooming. (if you're going to use zoom)
- Make sure your speed, length and duration of zoom stays the same.
- Hold three seconds before and after zooming so you can edit out the zoom later if needed or wanted.
- Gradually pick-up speed and slow down as you start and stop.

### *Lighting*

- Lighting is imperative to a good video.

- No one wants to watch a video where they cannot figure out what the images are because they are so dark, or even too bright. Getting your lighting set correctly will help your viewer stay engaged in the video.
  - Two goals:
    - Get enough light
    - Use the light you have to shape and define the scene
- Usually the pattern of lighting used is one dominant source combined with a secondary light.
- The dominant light is called the key light.
  - This light provides distinctive highlights and shadows in the scene.
  - Place the key light above the subject and to one side of the camera.
    - Sunlight is the best, but not always usable and can't be controlled.
- It is in the right place when a triangle appears on the shaded side of the face.
- Secondary light is called fill light.
  - Open detail in shaded areas you can use a fill light (which is the secondary light.)
  - It should be half the intensity of the key light.
  - The fill light should be placed mirror opposite of the key light.
  - To make the fill light half the intensity when you have two identical lights move the fill light further way.
- If you move the light twice the length away from the subject will provide  $\frac{1}{4}$  the illumination of the closer light or 4:1 (meaning the closer light is four times as bright).
- Normal ratio is 3:1 meaning fill light should be placed 1 and  $\frac{1}{2}$  times the distance from the key light.
- A back light is placed opposite the key light and shines on the subject from behind. A back light adds texture and shine to hair and separates the subject from the background.
  - A background light can be used to illuminate the background to provide further separation.
  - Don't place subject in front of an open window with lots of light, it will turn out dark due to the back light.
    - With darker subjects use a darker background or less background lighting.
- Lighting Diagram
  - This helps you identify potential shadow areas and correct them before filming begins.
- Additional Lighting Concepts
  - **Broad lighting** is when the key light is on the same side as the side of the face towards the camera. (usually used for news)
  - **Short lighting** is when the fill light shines on the side with the face towards the camera. (This is usually used in portraits.)
  - Using an **umbrella light** is an inexpensive way to improve lighting.

- The light is turned away from the subject and reflected back with a heat resistant umbrella.

*Sound-* As with lighting, poor sound quality can be very distracting for a viewer.

- With wireless microphones (mics), know the range that the transmitter and receiver can be apart.
- Be aware of interferences with wireless mics.
- Conceal wireless mics as best you can.
- Clip mics to the ties and collars to keep down the sound of clothes moving.
- Make sure the transmitter is out of sight.
- You may have to ask the subject to run the mic cord down their shirt.
- Be willing to play with positioning of mic to get the best sound without distorting it.
- If you have the ability watch recording levels, they can help you see their might be a problem.
- Monitor with headphones.
- Foam on mics helps reduce wind noise.
- Mics sometimes pick-up noise even we can't hear.
- Pay attention to distance- a sound should make sense with your shot.
  - If you are using a close shot of a farmer getting in and starting up his tractor, but record the sound at 20 ft. away your audience is going to notice the tractor wasn't as loud as it should have been starting up.
- In a group discussion (when recording a group discussion)
  - Try and get a mic in the middle of the group.
- With two people make sure they use two of the same mics so that the sounds blend.
- Do your best to control outside sounds. Turn off phones, close the door, etc.
- Record room tones, people breathing, computers humming and other things that are always in the room so that in silent parts of the interview it can be edited in to keep from the clip seeming unnatural.
- **WATCH WHAT YOU SAY!**

*Other helpful hints*

- Give the subject room to move, so have them in the middle of the frame instead of at the edge.
- Only leave a small space above the subject's head.
- Leave space if the subject is looking at something off camera.
- Make sure that if you have a moving object it stays going the same direction through all of your frames.
  - A tractor that started moving from the right side of the screen to the left should not switch to moving from the left to the right.



- If you need to show the opposite side of a person or object, get a head on shot and then switch sides. Go from left to front to right, instead of left to right.
- The same rule goes for eye lines. If two subjects are looking at each other in the wide shot, make sure it seems as if they are looking at each other in the close up shoot.
- If you have a wide shot of a subject with their right shoulder and then do a shot from behind make sure it is over their right shoulder not their left.
- Be careful not to distract your subjects.

**Summary/Review:**

- Knowing where things are on your camera and how to use them are important to producing a great video. Take your user's manual with you when you are going to use your camera and refer to it for any questions you may have.
- By utilizing all the techniques covered in this lesson; steadying the camera, properly using the zoom, sound, and lighting; you will be able to make your videos seem more professional.

## Videography Lesson Three Picking a Story and Writing a Storyboard

### Materials List:

- PowerPoint
- Handouts

**Situation:** Introduction to Agricultural Communications

### Objectives:

- Generate ideas for writing a story that you will publish with 100% accuracy.
- Construct a storyboard for your selected story with 90% accuracy.

### Key Terms:

- Proximity
- Timeliness
- Impact
- Prominence
- Storyboard
- Angle

### Interest Approach:

- Ask students to watch the news the night before this lesson is to be taught. Alternatively, you can find and show them news clip(s) on the internet that is acceptable for the class.
  - When they come into class the day of the lesson or after showing the clip, ask them about some of the story(s) they saw.
  - Ask them if the story interested them and why.
- Their reasoning will help them understand the way that journalist pick stories to report on.

### Reasons to Learn:

- Why would we need to learn how to pick a story and then write a storyboard?
  - We want our stories to be interesting to our audience.
  - Our stories need to be organized before we actually shoot the footage.

### Questions to Answer:

- What are criteria for choosing a story?
- What are the components of writing/creating a storyboard?

### Answers to Questions:

- *Selecting Stories*
  - Remember during your show you only have an allotted amount of time, so picking which stories make it on air is very important.
  - You need to find the right balance between information and entertainment.

- You have to make it entertaining, otherwise no one will listen, however it doesn't need to just be pointless information.
- *Things to consider for choosing a story*
  - *Proximity*
    - What happens locally is important to local people.
    - There are times when outside stories are more important than local, but if the stories are equal then go with the local story.
    - People like to see their friends and family on TV and want to know what's going on in their community.
  - *Timeliness*
    - Things that happened more than a few hours before the show airs are starting to get dated.
    - When doing a feature story is consider if the topic is a current issue or relevant to what is happening in the lives of your audience.
      - You wouldn't want to do a story on winter shelter for cattle in the middle of July.
  - *Impact*
    - Use stories that effect the most viewers/listeners.
    - Don't forget about the rest of the show, because you have one big story.
    - Emotional stories also have an impact on audience.
      - Stories of good Samaritans or children beating a deadly form of cancer.
      - Other stories like no more income tax affect people.
  - *Prominence*
    - People like to know what "important" people or people that are largely popular are doing.
      - This explains why when the President gets a new dog, it makes the news.
  - *Conflict*
    - Conflict makes good stories.
    - Make sure there is a point to the conflict though; otherwise it would just be like the Jerry Springer show all the time.
      - Example of good conflict: PETA vs. farmers over an animal rights bill that will end up costing the farmers thousands of dollars to meet those standards.
  - *Unusual or Human Interest stories*
    - You can use these stories at the end of the show to change the mood or bring happiness or laughter to your audience. This is a really good idea if a majority of you show has been violence or bad things like the stock market crashing.
      - An example is a tiger that becomes a mother to piglets, this story doesn't really impact anyone, but it's interesting and it ends your show on a happy note.
  - *Simplicity*
    - Pick stories that are simple to tell.
    - Complex stories get confusing for audiences.
    - Try relating difficult things to common things (dumb down the information to your audience's level.)
    - Use graphics to help you tell complex stories. (graphs, charts, visual aids)

- *Other tips*
  - It is best to have sound bites or video clips to you to help you tell a story.
  - Consider what is important to the people in your area.
    - If you're doing a farm broadcast and the weather forecast is calling for a lot of rain in the middle of harvest season, the audience wants to know so they can prepare.
  - Remember your stations values or philosophy.

## **Story Boarding**

### **What is a storyboard?**

- Storyboards are graphic organizers such as a series of illustrations or images displayed in sequence for the purpose of pre-visualizing a motion picture, animation, motion graphic or interactive media sequence.

*Step 1.* Choose the topic of your video.

*Step 2.* Choose the angle (POV) of your story.

- For example if you are going to do a video on a pick-your-own peach orchard is the story going to be about the customers? Is it going to be about the owners? Or is it going to be from the angle of the fruit itself or the overall production?

*Step 3.* Once you have chosen a topic and angle, think of people you can talk to.

*Step 4.* Write down several ideas of footage you want to include in your video. Think about all scenes that will help you tell your story. (If the footage can tell the story without words, or very few words, you are doing a good job!)

## **Creating a shot list**

- Shot List
  - The sequence of camera shots that tells the story.
- Shooting Order
  - Allows the crew to set up at a location and capture all footage needed at one time.
- Use the storyboard as a guide for your shot list.
  - Tell camera operator the order and kind of shot to take.

## **Shot Angle**

- Remember that varying your camera shots can advance the storyline or impact the meaning
- Be sure
  - Point-of-view (POV)
    - Subject's point of view
  - Over-the-shoulder (OS)
    - Pointed over the shoulder of one person and camera is directed at another
      - Looking over an interviewer's shoulder at the person being interviewed
  - Reverse Angle (RA)
    - Opposite of OS shot
  - Reaction Shot (RS)
  - Closes in on subjects reaction

## Sample Footage List

WS-Wide Shot	MS-Mid Shot	CU-Close Up
--------------	-------------	-------------

- WS of Jill in kitchen
- MS Jill goes to cupboard and takes out peanut butter (PAN-LEFT)
- MS Jill walks to refrigerator and gets loaf of bread (continue PAN)
- CU Jill opens drawer, takes knife (TILT)
- CU Jill takes banana from fruit basket (ZOOM-IN)
- MS Jill carries things back to counter (PAN-RIGHT)
- MS Jill sniffs bread (ZOOM-IN)
- WS banana peel falls on floor (TILT-DOWN)
- WS Jill slips on banana peel and falls down
- CU Jill's face (TILT-DOWN)

### Summary/Review:

- When picking a story to report on, there are many aspects to consider. The main points are **topic**, the **audience** you are reposting to and their **interests**. If you do not show something that is interesting to your audience, they will not watch it. In addition to keeping the audience interested, you must tell them all the details but also keep the story simple.
- After you have picked a topic, it is time to draw up a storyboard with all the possible ideas you have for a complete video.
- Remember that storyboards are a way to organize your thoughts and are not set in stone. You can still change things but you will at least have a plan.

## **Videography Lesson Plan Four: Interviewing and Script Writing**

### **Materials List:**

- PowerPoint
- Handouts
- Worksheet

This lesson can be taught two ways.

1. Using the lesson plan and supporting PowerPoint presentation.
2. Using the lesson plan and handouts, plus the worksheet.
  - a. The handouts and worksheet will allow students to read through the material and then answer questions relating to their video project.

**Situation:** Introduction to Agricultural Communications

### **Objectives:**

- Identify ten questions to ask in an interview regarding the story topic previously chosen following the guidelines with 90% accuracy.
- Students set up an interview with a member of the community, gaining 80% responses for a story.
- Write a script for the storyboards previously created with 90% completed before filming.

### **Key Terms:**

- Interview
- Professional
- Story Structure

### **Interest Approach:**

Ask two students to interview each other at the beginning of class. While they may be able to ask each other questions, there will be no purpose and they will not be prepared. This will show students the importance of organization in an interview.

### **Reasons to Learn:**

- Why is the interview important?
- Why does a script need to be written?

### **Questions to Answer:**

- What should be done before the interview?
- What should be done during the interview?
- How do I finish the interview?
- How do I take what I learned in the interview and put the information into the script?

### **Answers to Questions:**

- *Why is the interview important?*

- This is where you get the background information and sound bites to use during your story, so it is very important.
- Take appropriate steps
  - Before, during, and after the interview

*Note: Many of the interviewing tips listed in the next sections will not be utilized in the video project. For this project, any interview they conduct will be videotaped. Also, they may have limited access to people on the day of filming so experts in the areas of their story may not be available.*

- ***Before the Interview***

- Get your thoughts together
  - This will help you look more professional and will help keep the interview going and interesting.
  - If you do not have a plan, the person you are interviewing may feel that you are wasting their time.
- Ask yourself these questions when developing ideas for your interview.
  - How do I make this story real for my audience?
  - How do I make a difference?
  - How do I tell this story in a compelling and clear way?
- Think of the questions you want to ask each of your contacts for your story.
- Remember, while you don't want to give the answers to the person you are interviewing you can ask the right questions to get the story you are looking for.
  - Also, if you start with an angle in mind and your contacts give you the idea for an even better story, go with it, it's ok to change your angle.

- ***Interviewing Tips***

- Do not use the same expert all the time.
- Find new sources for your stories.
- Think about all the different people that could be interviewed for a story.
- Ex. Egg Recall
  - You could interview the producer, the consumer, or the manager at the grocery store
- If you interview people that are affected by the story it adds a human touch to your story.

- ***During the Interview***

- As stated before this will only make you look better. Go into your interview knowledgeable and with a clear vision of what you want to accomplish.
  - Learn as much about your subject as you can before the interview.
  - Ask others what they think is important about the subject.
  - Have an idea of what questions you will ask and in what order.
  - Write down a few questions to use, to help jog your memory.
  - Make the interview a conversation, so don't just read each question from your list and call it good.
- Gather information off-camera and then use the camera or recorder to get your sound bites.

- Always pay attention to what is going on in the world around by use of news and internet.
    - Remember the first question sets the tone of the interview.
      - If you offend you the person with what you ask or with the tone you ask it, it changes the tone of the rest of the interview.
    - Treat people the way you would want to be treated.
      - Tell the person up front who you are, who you're with, and what you are doing.
  - Don't tell them the specific questions before hand, because it leads to rehearsed answers.
    - Use both a professional, but conversational tone.
    - Ask questions that can be answered, but must be answered with more than a yes or no answer.
  - Prior to the interview beginning:
    - Set up the camera and microphone, and make sure they are working properly.
      - Remember to keep the camera rolling the entire time.
  - Look the person in the eyes and keep eye contact.
  - Don't fidget, sit still.
  - When shooting video ask them to look at you not the camera.
    - The camera should be placed over your shoulder or on a tripod.
  - Do NOT chew gum during an interview.
  - If possible try to conduct the interview at the scene of the event or setting of the story.
  - Get a full name and how to spell the name of the person you interviewed, as well as a phone number so if you needed to follow up with them or clarify a point you can.
    - Ask them to pronounce their name correctly as well and get official titles and spelling.
  - Remember sometimes people lie or shade the truth.
    - Sometimes you have to read between the lines.
  - Watch facial expressions and others to see if they really agree with what they are saying.
    - Ask probing questions to ensure you have the correct meaning. Ex. Tell me more about... or when you say "\_\_\_\_\_" What do you mean by that?
- ***Wrapping up the interview***
  - Make sure before you finish your interview you have all the answers you need.
  - Ask the interviewee to summarize in a few sentences if you need them to.
    - Usually helpful if the person is a rambler.
  - Take the time to get the most clear understandable statement.
    - Even if it means asking the question two or three times or rewording it.
  - Once you have finished asking your questions ask the person if there is anything they would like to add.
  - If you have a videographer ask if there is anything he/she want answered.
  - Sometimes others hear things differently or think of things you might not.



- **Writing the Script**
  - After the interview process, you will want to prepare a script for use with your video. Much like you prepared for your interview, you will want to organize all your ideas.
    - Gather facts to back up your quotes from contacts.
      - Decide which quotes you want to use.
    - Write a lead and fillers that work with your quotes.
    - Decide what parts are going to be “live” and which “voice over”.
      - Voice over: meaning you can hear the voice, but you do not see a person; just footage.
    - Scripts are written in two columns.
      - The column on the left is for the video footage.
      - The right column is for script information.
        - (What’s going to be said)
- Structure of Story Telling: Writing a script
  - Three Act Structure
    - Act One: Beginning
      - Who, what, when, where, why of the story
      - Over when this is set up
      - This is your lead.
    - Act Two: Middle
      - Journey that takes place
      - Main part of the story or conflict
    - End
      - Resolution
  - Your script should be centered on bringing the three acts structure to life.
- **Script Writing Tips**
  - Before writing your script, get all your information organized.
  - Engage in pre-writing
    - This allows you to get all your thoughts down on paper.
  - Read your script out loud.
    - Viewers will hear, not read the message.
    - Check closely for grammatical errors.

**Summary/Review:**

Let students work in their groups to begin organizing questions to ask the person they wish to interview for their video. Have them turn in a list of questions at the end of class. Also, provide work time for the students to prepare a script for the video.

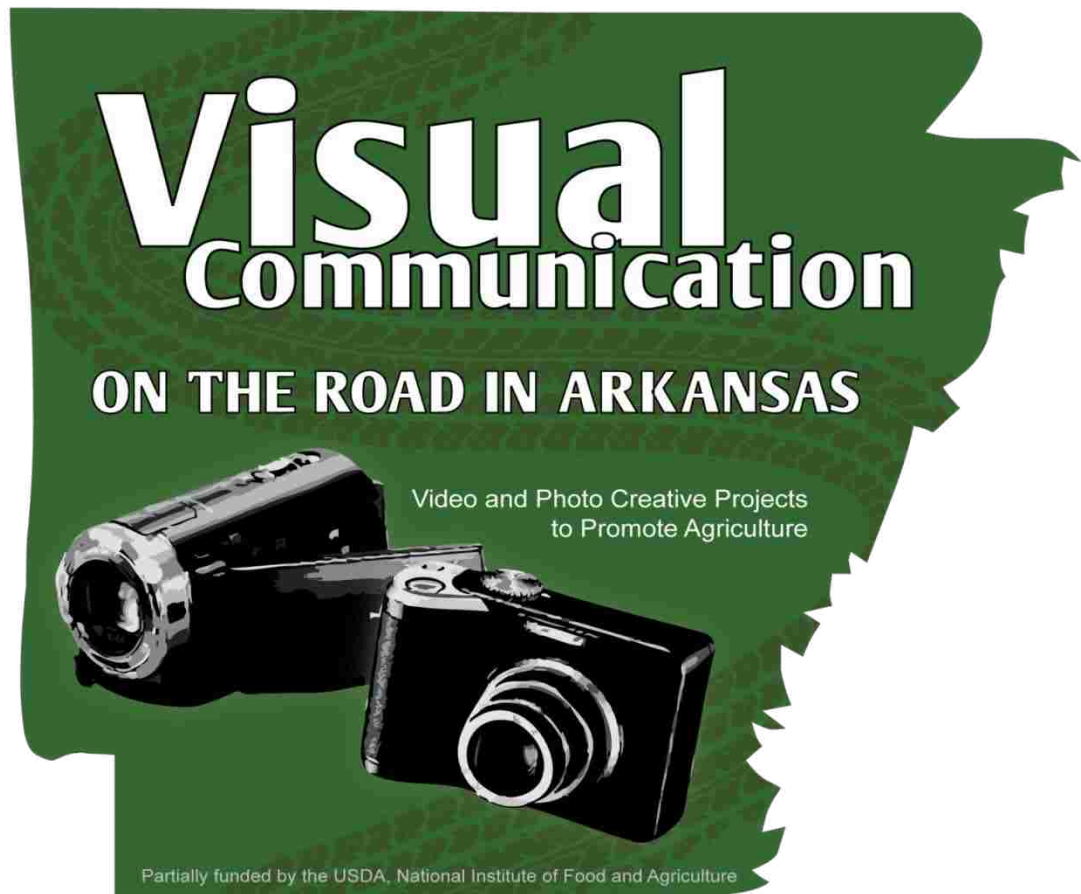
Students should be given a full workday, or two to pull all materials together and get ready for the visit from the UA.

**Appendix D**  
**Assessment Packet**

Name \_\_\_\_\_

Date \_\_\_\_\_

School \_\_\_\_\_



**Student completes this assessment prior to curriculum instruction in photography, writing and videography.**

### **Curriculum Pre-Test**

#### **Photography**

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

1. Two types of cameras are \_\_\_\_\_ and \_\_\_\_\_.
2. A rectangular frame divided into thirds horizontally and vertically with points located where the lines intersect is called the \_\_\_\_\_ of \_\_\_\_\_.
3. Using the \_\_\_\_\_ on the camera provides the most accurate preview of the photograph.
4. A photo \_\_\_\_\_ describes a photograph or illustration within a page layout.
5. When writing a photo caption, AP style suggests identifying the “who, what, where, when, why and \_\_\_\_\_”.

#### *True/False*

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

6. \_\_\_\_\_ The first step in taking a photo is to turn the camera’s power on.
7. \_\_\_\_\_ The simplicity rule means keeping the items in a photo relatively simple.
8. \_\_\_\_\_ Major errors can be fixed with photo editing software.
9. \_\_\_\_\_ Clichés can be used when writing a photo caption.
10. \_\_\_\_\_ Writers should never assume information.

#### **Writing**

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

1. The \_\_\_\_\_ pyramid provides all the most important information at the beginning of the story.
2. The \_\_\_\_\_ of a story lead is the information about the person, group, or organization.
3. News stories are \_\_\_\_\_ sensitive.
4. Feature stories use \_\_\_\_\_ style instead of the inverted pyramid.
5. The “\_\_\_\_\_” paragraph found in the body contains the “so what” or main points of the feature story.

## Videography

### True/False

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

1. \_\_\_\_\_ The three phases of production are pre-production, filming, and post production.
2. \_\_\_\_\_ Holding the video camera in your hand is the best way to cut down movement.
3. \_\_\_\_\_ Out of focus footage can be corrected with editing software.
4. \_\_\_\_\_ Storyboards are used to organize your thoughts and creative ideas after filming.
5. \_\_\_\_\_ After the interview, it is ok to ask for clarification on any question or answer.

### Fill in the blank

Read each question and fill in the blank with the correct answer(s).

6. Questions should be \_\_\_\_\_ before interviewing someone.
7. You should only use the \_\_\_\_\_ when necessary.
8. Editing of video is done during the \_\_\_\_\_ stage of production.
9. The director uses the \_\_\_\_\_ to tell the camera operator which footage to take.
10. The main ideas to remember when taping a story are the \_\_\_\_\_, audience, and their \_\_\_\_\_.

## Careers

Please answer the following questions about your plans for the future.

1. Do you plan to pursue a college degree in agriculture?      Yes                  No
  - a. If yes, please tell us what you plan to major in. \_\_\_\_\_
  - b. Where do you plan to go to college? \_\_\_\_\_
2. As of now, what do you want to do after high school, or college, as a career? List one or many.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  - e. \_\_\_\_\_

**Complete this Section  
After Instruction  
on Photography  
has been Completed**

**Photography Curriculum Perceptions and Knowledge Assessment  
-- Post Test--**

**Photography Curriculum Assessment**

(How to use a camera, photo composition, photo manipulation, and photo captions)

DIRECTIONS: Please indicate your level of agreement with each of the following statements. Circle one response for each statement which most closely reflects your agreement / disagreement with that statement.

Level of agreement scale: **1**=strongly disagree; **2**=somewhat disagree; **3**=slightly disagree; **4**=neutral; **5**=slightly agree; **6**=somewhat agree; **7**=strongly agree.

	<u>Level of Agreement</u>						
	(circle your response)						
	Strongly Disagree			Neutral			Strongly Agree
1. I really enjoyed the photography.	1	2	3	4	5	6	7
2. Photography is very practical.	1	2	3	4	5	6	7
3. Photography is a good subject.	1	2	3	4	5	6	7
4. Photography is okay.	1	2	3	4	5	6	7
5. I could do very well without photography.	1	2	3	4	5	6	7
6. I am not interested in photography.	1	2	3	4	5	6	7
7. I have no desire for photography.	1	2	3	4	5	6	7
8. I have seen no value in photography.	1	2	3	4	5	6	7
9. Photography is a waste of time.	1	2	3	4	5	6	7
10. I hate photography.	1	2	3	4	5	6	7
11. Photography amazes me.	1	2	3	4	5	6	7
12. Photography can be used in real life.	1	2	3	4	5	6	7
13. Photography is interesting.	1	2	3	4	5	6	7
14. To me photography is more or less boring.	1	2	3	4	5	6	7
15. Photography is dull.	1	2	3	4	5	6	7
16. Photography does not hold my interest at all.	1	2	3	4	5	6	7
17. All the materials in photography are very uninteresting.	1	2	3	4	5	6	7
18. Photography cannot benefit me.	1	2	3	4	5	6	7
19. Photography is disliked by all students.	1	2	3	4	5	6	7
20. Photography is enjoyable.	1	2	3	4	5	6	7

## Photography Curriculum Perceptions Assessment

Answer the questions below regarding the lessons on photography you have been taught.

1) What did you enjoy best (be specific)?

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2) What did you enjoy least (be specific)?

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3) What would you have liked to learn/do that you did not (be specific)?

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---

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## Photography Curriculum Knowledge Assessment

### Photography

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

1. The two types of still image cameras are \_\_\_\_\_ and \_\_\_\_\_.
2. A rectangular frame divided into thirds horizontally and vertically with points located where the lines intersect is called the \_\_\_\_\_ of \_\_\_\_\_.
3. Using the \_\_\_\_\_ on the camera provides the most accurate preview of the photograph.
4. A photo \_\_\_\_\_ describes a photograph or illustration within a page layout.
5. When writing a photo caption, AP style suggests identifying the “who, what, where, when, why and \_\_\_\_\_”.

### *True/False*

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

6. \_\_\_\_\_ The first step in taking a photo is to turn the camera’s power on.
7. \_\_\_\_\_ The simplicity rule means keeping the items in a photo relatively simple.
8. \_\_\_\_\_ Major errors can be fixed with photo editing software.
9. \_\_\_\_\_ Clichés can be used when writing a photo caption.
10. \_\_\_\_\_ Writers should never assume information.



**Complete this Section  
After Instruction on Writing  
has been Completed.**

**Writing Curriculum Perceptions and Knowledge Assessment**  
**-- Post Test--**

**Writing Curriculum Assessment**  
 (News stories, feature stories, leads)

DIRECTIONS: Please indicate your level of agreement with each of the following statements. Circle one response for each statement which most closely reflects your agreement / disagreement with that statement.

Level of agreement scale: **1**=strongly disagree; **2**=somewhat disagree; **3**=slightly disagree; **4**=neutral; **5**=slightly agree; **6**=somewhat agree; **7**=strongly agree.

	<u>Level of Agreement</u> (circle your response)						
	Strongly Disagree		Neutral			Strongly Agree	
1. I really enjoyed the writing.	1	2	3	4	5	6	7
2. Writing is very practical.	1	2	3	4	5	6	7
3. Writing is a good subject.	1	2	3	4	5	6	7
4. Writing is okay.	1	2	3	4	5	6	7
5. I could do very well without writing.	1	2	3	4	5	6	7
6. I am not interested in writing.	1	2	3	4	5	6	7
7. I have no desire for writing.	1	2	3	4	5	6	7
8. I have seen no value in writing.	1	2	3	4	5	6	7
9. Writing is a waste of time.	1	2	3	4	5	6	7
10. I hate writing.	1	2	3	4	5	6	7
11. Writing amazes me.	1	2	3	4	5	6	7
12. Writing can be used in real life.	1	2	3	4	5	6	7
13. Writing is interesting.	1	2	3	4	5	6	7
14. To me writing is more or less boring.	1	2	3	4	5	6	7
15. Writing is dull.	1	2	3	4	5	6	7
16. Writing does not hold my interest at all.	1	2	3	4	5	6	7
17. All the materials in writing are very uninteresting.	1	2	3	4	5	6	7
18. Writing cannot benefit me.	1	2	3	4	5	6	7
19. Writing is disliked by all students.	1	2	3	4	5	6	7
20. Writing is enjoyable.	1	2	3	4	5	6	7

## Writing Curriculum Perceptions Assessment

Answer the questions below regarding the lessons on writing you have been taught.

1. What did you enjoy best (be specific)?

---

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2. What did you enjoy least (be specific)?

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---

---

3. What would you have liked to learn/do that you did not (be specific)?

---

---

---

## Writing Curriculum Knowledge Assessment

### Writing

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

1. The \_\_\_\_\_ pyramid provides all the most important information at the beginning of the story.
2. The \_\_\_\_\_ of a story lead is the information about the person, group, or organization.
3. News stories are \_\_\_\_\_ sensitive.
4. Feature stories use \_\_\_\_\_ style instead of the inverted pyramid.
5. The \_\_\_\_\_ paragraph found in the body of the story contains the “so what” or main points of the feature story.

**Complete this Section  
After Instruction  
on Videography  
has been Completed.**

**Videography Curriculum Perceptions and Knowledge Assessment  
-- Post Test--**

**Videography Curriculum Assessment**

(How to use a video camera, the video production process, creating a storyboard, interviewing experts, and writing a script)

DIRECTIONS: Please indicate your level of agreement with each of the following statements. Circle one response for each statement which most closely reflects your agreement / disagreement with that statement.

Level of agreement scale: **1**=strongly disagree; **2**=somewhat disagree; **3**=slightly disagree; **4**=neutral; **5**=slightly agree; **6**=somewhat agree; **7**=strongly agree.

	<u>Level of Agreement</u> (circle your response)						
	Strongly Disagree			Neutral			Strongly Agree
1. I really enjoyed the videography.	1	2	3	4	5	6	7
2. Videography is very practical.	1	2	3	4	5	6	7
3. Videography is a good subject.	1	2	3	4	5	6	7
4. Videography is okay.	1	2	3	4	5	6	7
5. I could do very well without videography.	1	2	3	4	5	6	7
6. I am not interested in videography.	1	2	3	4	5	6	7
7. I have no desire for videography.	1	2	3	4	5	6	7
8. I have seen no value in videography.	1	2	3	4	5	6	7
9. Videography is a waste of time.	1	2	3	4	5	6	7
10. I hate videography.	1	2	3	4	5	6	7
11. Videography amazes me.	1	2	3	4	5	6	7
12. Videography can be used in real life.	1	2	3	4	5	6	7
13. Videography is interesting.	1	2	3	4	5	6	7
14. To me videography is more or less boring.	1	2	3	4	5	6	7
15. Videography is dull.	1	2	3	4	5	6	7
16. Videography does not hold my interest at all.	1	2	3	4	5	6	7
17. All the materials in videography are very uninteresting.	1	2	3	4	5	6	7
18. Videography cannot benefit me.	1	2	3	4	5	6	7
19. Videography is disliked by all students.	1	2	3	4	5	6	7
20. Videography is enjoyable.	1	2	3	4	5	6	7

## Videography Curriculum Perceptions Assessment

Answer the questions below regarding the lessons on videography you have been taught.

1. What did you enjoy best (be specific)?

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---

---

2. What did you enjoy least (be specific)?

---

---

---

3. What would you have liked to learn/do that you did not (be specific)?

---

---

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## Videography Curriculum Knowledge Assessment

### *True/False*

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

- \_\_\_\_\_ The three phases of production are pre-production, filming, and post production.
- \_\_\_\_\_ Holding the video camera in your hand is the best way to cut down movement.
- \_\_\_\_\_ Out of focus footage can be corrected with editing software.
- \_\_\_\_\_ Storyboards are used to organize your thoughts and creative ideas after filming.
- \_\_\_\_\_ After the interview, it is ok to ask for clarification on any question or answer.

### *Fill in the blank*

Read each question and fill in the blank with the correct answer(s).

- Questions should be \_\_\_\_\_ before interviewing someone.
- You should only use the \_\_\_\_\_ when necessary. 77
- Editing of video is done during the \_\_\_\_\_ stage of production.
- The director uses the \_\_\_\_\_ to tell the camera operator which footage to take.
- The main ideas to remember when taping a story are the \_\_\_\_\_, audience, and their \_\_\_\_\_.

**Thank you!**

**Appendix E**  
**Delayed Posttest**



Name \_\_\_\_\_

Date \_\_\_\_\_

**Agricultural Communication Curriculum Perceptions and Knowledge Assessment**  
**--Delayed Post Test--**

**Agricultural Communications Curriculum Assessment**

**Photography** (how to use a camera, photo composition, photo manipulation, and photo captions), **Writing** (news stories, feature stories, leads), **Videography** (how to use a video camera, the video production process, creating a storyboard, interviewing experts, and writing a script)

DIRECTIONS: Please indicate your level of agreement with each of the following statements. Circle one response for each statement which most closely reflects your agreement / disagreement with that statement.  
Level of agreement scale: 1=strongly disagree; 2=somewhat disagree; 3=slightly disagree; 4=neutral; 5=slightly agree; 6=somewhat agree; 7=strongly agree.

Level of Agreement  
(circle your response)

	Strongly Disagree		Neutral		Strongly Agree	
1. I really enjoyed the agricultural communications curriculum.	1	2	3	4	5	6 7
2. Agricultural communication curriculum is very practical.	1	2	3	4	5	6 7
3. Agricultural communication curriculum is a good subject.	1	2	3	4	5	6 7
4. Agricultural communication curriculum is okay.	1	2	3	4	5	6 7
5. I could do very well without agricultural communication curriculum.	1	2	3	4	5	6 7
6. I am not interested in agricultural communication curriculum.	1	2	3	4	5	6 7
7. I have no desire for agricultural communication curriculum.	1	2	3	4	5	6 7
8. I have seen no value in agricultural communication curriculum.	1	2	3	4	5	6 7
9. Agricultural communication curriculum is a waste of time.	1	2	3	4	5	6 7
10. I hate agricultural communication curriculum.	1	2	3	4	5	6 7
11. Agricultural communication curriculum amazes me.	1	2	3	4	5	6 7
12. Agricultural communication curriculum can be used in real life.	1	2	3	4	5	6 7
13. Agricultural communication curriculum is interesting.	1	2	3	4	5	6 7
14. To me agricultural communication curriculum is more or less boring.	1	2	3	4	5	6 7
15. Agricultural communication curriculum is dull.	1	2	3	4	5	6 7
16. Agricultural communication curriculum does not hold my interest at all.	1	2	3	4	5	6 7
17. All the materials in Agricultural communication curriculum are very uninteresting.	1	2	3	4	5	6 7
18. Agricultural communication curriculum cannot benefit me.	1	2	3	4	5	6 7
19. Agricultural communication curriculum is disliked by all students.	1	2	3	4	5	6 7
20. Agricultural communication curriculum is enjoyable.	1	2	3	4	5	6 7

Adapted from Purdue Research Foundation's (1986) Attitudes Toward Any School Subject instrument.

### Visit from the Mobile Classroom Perceptions Assessment

Answer the questions based on your experience in the mobile classroom brought to your school.

DIRECTIONS: Please indicate your level of agreement with each of the following statements. Circle one response for each statement which most closely reflects your agreement / disagreement with that statement.

Level of agreement scale: 1=strongly disagree; 2=somewhat disagree; 3=slightly disagree; 4=neutral; 5=slightly agree; 6=somewhat agree; 7=strongly agree.

	<u>Level of Agreement</u>						
	(circle your response)						
	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
1. I really enjoyed the visit from the mobile classroom.	1	2	3	4	5	6	7
2. The visit from the mobile classroom is very practical.	1	2	3	4	5	6	7
3. The visit from the mobile classroom is a good subject.	1	2	3	4	5	6	7
4. The visit from the mobile classroom is okay.	1	2	3	4	5	6	7
5. I could do very well without the visit from the mobile classroom.	1	2	3	4	5	6	7
6. I am not interested in the visit from the mobile classroom.	1	2	3	4	5	6	7
7. I have no desire to visit the mobile classroom.	1	2	3	4	5	6	7
8. I have seen no value in the visit from the mobile classroom.	1	2	3	4	5	6	7
9. The visit from the mobile classroom is a waste of time.	1	2	3	4	5	6	7
10. I hate the visit from the mobile classroom.	1	2	3	4	5	6	7
11. The visit from the mobile classroom amazes me.	1	2	3	4	5	6	7
12. The visit from the mobile classroom can be used in real life.	1	2	3	4	5	6	7
13. The visit from the mobile classroom is interesting.	1	2	3	4	5	6	7
14. To me the visit from the mobile classroom is more or less boring.	1	2	3	4	5	6	7
15. The visit from the mobile classroom is dull.	1	2	3	4	5	6	7
16. The visit from the mobile classroom did not hold my interest at all.	1	2	3	4	5	6	7
17. All the materials in the mobile classroom visit are very uninteresting.	1	2	3	4	5	6	7
18. The visit from the mobile classroom cannot benefit me.	1	2	3	4	5	6	7
19. The visit from the mobile classroom is disliked by all students.	1	2	3	4	5	6	7
20. The visit from the mobile classroom is enjoyable.	1	2	3	4	5	6	7

Adapted from Purdue Research Foundation's (1986) Attitudes Toward Any School Subject instrument.

## Agricultural Communications Curriculum Knowledge Assessment

### Photography

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

1. The two types of cameras are \_\_\_\_\_ and \_\_\_\_\_.
2. A rectangular frame divided into thirds horizontally and vertically with points located where the lines intersect is called the \_\_\_\_\_ of \_\_\_\_\_.
3. Using the \_\_\_\_\_ on the camera provides the most accurate preview of the photograph.
4. A photo \_\_\_\_\_ describes a photograph or illustration within a page layout.
5. When writing a photo caption, AP style suggests identifying the “who, what, where, when, why and \_\_\_\_\_”.

*True/False*

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

6. \_\_\_\_\_ The first step in taking a photo is to turn the camera’s power on.
7. \_\_\_\_\_ The simplicity rule means keeping the items in a photo relatively simple.
8. \_\_\_\_\_ Major errors can be fixed with photo editing software.
9. \_\_\_\_\_ Clichés can be used when writing a photo caption.
10. \_\_\_\_\_ Writers should never assume information.

### Writing

*Fill in the blank.*

Read each question and fill in the blank with the correct answer(s).

- 1) The \_\_\_\_\_ pyramid provides all the most important information at the beginning of the story.
- 2) The \_\_\_\_\_ of a story lead is the information about the person, group, or organization.
- 3) News stories are \_\_\_\_\_ sensitive.
- 4) Feature stories use \_\_\_\_\_ style instead of the inverted pyramid.
- 5) The \_\_\_\_\_ paragraph found in the body of the story contains the “so what” or main points of the feature story.

### Videography

*True/False*

Read each statement and determine if the statement is true or false. Write “True” or “False” in the blank.

1. \_\_\_\_\_ The three phases of production are pre-production, filming, and post production.
2. \_\_\_\_\_ Holding the video camera in your hand is the best way to cut down movement.
3. \_\_\_\_\_ Out of focus footage can be corrected with editing software.
4. \_\_\_\_\_ Storyboards are used to organize your thoughts and creative ideas after filming.
5. \_\_\_\_\_ After the interview, it is ok to ask for clarification on any question or answer.

*Fill in the blank*

Read each question and fill in the blank with the correct answer(s).

6. Questions should be \_\_\_\_\_ before interviewing someone.
7. You should only use the \_\_\_\_\_ when necessary.
8. Editing of video is done during the \_\_\_\_\_ stage.
9. The director uses the \_\_\_\_\_ to tell the camera operator which footage to take.
10. The main ideas to remember when taping a story are the \_\_\_\_\_, audience, and their \_\_\_\_\_.

**Mobile Classroom Experience Perceptions Assessment**

Answer the questions below regarding the visit from the University of Arkansas faculty and staff with the mobile classroom.

1) What did you like best (be specific)? \_\_\_\_\_

2) What did you like least (be specific)? \_\_\_\_\_

3) What would you have liked to learn/do that you did not (be specific)? \_\_\_\_\_

4) Do you plan to pursue a college degree in agriculture?      Yes      No

a. If yes, please explain? \_\_\_\_\_

b. Where do you plan to go to college? \_\_\_\_\_

5) As of now, what do you want to do after high school, or college, as a career? List one or many.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

Please circle one:

6) Will you specify your gender?      Male      Female

7) How many agriculture courses have you taken?      1      2      3      4      5+

8) What is your grade classification?      Freshman      Sophomore      Junior      Senior

9) Do you live in a rural or urban area?      Rural      Urban

10) Are you involved in other student organizations?      Yes      No

11) Are you involved with other communication/journalism activities (ex. yearbook, school television)?

Yes      No

Thank you!!

**Appendix F**  
**Video Content Analysis Form**

Content Analysis Form

School Name: \_\_\_\_\_

Video Title: \_\_\_\_\_

Semester (circle one):          Pilot                  Spring 2011                  Fall 2011

**Photography:**

Photography Choice:

Do the photos chosen directly relate to the story the students are telling? Yes      No

Photo Composition:

Rule of Thirds \_\_\_\_\_

Framing \_\_\_\_\_

Simplicity \_\_\_\_\_

Subject Background Relationship \_\_\_\_\_

Centering/Symmetry \_\_\_\_\_

Line \_\_\_\_\_

Photo Manipulation:

Should students have manipulated (adjusted color, cropped, etc) photos used?

Yes                  No

Photo Captions: A caption is a short sentence or two that describes a photograph or illustration with in a page layout,

Do the photo captions used throughout the video effectively describe the photograph or illustrations? Yes                  No

**Writing:**

News Story: Did the students use the inverted pyramid to organize their story?

Feature Story: Did the students use block style to organize their story?

Who: \_\_\_\_\_

What: \_\_\_\_\_

Where: \_\_\_\_\_

When: \_\_\_\_\_

Why: \_\_\_\_\_

How: \_\_\_\_\_

**Video:**

Did the students use a tri-pod to reduce camera shake (if needed)? Yes No

Is lighting throughout the video consistent? Yes No

Does the video footage enhance or relate directly relate to the story being told? Yes No

If the students conducted an interview in the video,

Is the person interviewed “an expert” in the field? Yes No

Are questions asked used to enhance the story they are telling? Yes No

Are their questions answered by the person interviewed? Yes No