What's the Story? Using Perspective and Pictures to Improve Agricultural Literacy

Mackenzie Lightfoot, *Graduate Research Assistant*
New Mexico State University
mnlight@nmsu.edu

Lacey Roberts-Hill, *Assistant Professor*
2810 15th Street.
Lubbock, TX 79409
Texas Tech University
l.roberts-hill@ttu.edu

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Introduction & Need for Innovation

Agricultural literacy became a significant topic of discussion and concern starting in the 1990s (Clemons et al., 2018) and is still a topic of concern today with many educational efforts centered around the national agricultural literacy outcomes developed by Spielmaker and Leising (2013). Frick et al. (1991) defined agricultural literacy as, "possessing knowledge and understanding of the food and fiber system. An individual possessing such knowledge could synthesize, analyze, and communicate basic information about agriculture" (p. 52).

Since the Industrial Revolution, United States consumers have become increasingly disconnected from agriculture (Plunkert, 2024). The lack of knowledge has forced people to shy away from rural life and agricultural settings (Plunkert, 2024). While there is a rural disconnect, people have some trust in their food systems which is positive for agricultural production (Robinson et al., 2020). In a previous study, Robinson et al., (2020) found that consumers' engagement with agriculture was a positive predictor for their trust in their food system. However, not all consumers, especially those in urban areas, have access to agriculture experiences. This lack of access creates an opportunity for urban consumers to connect to agriculture through other means including visual communication and educational programming like those offered by National Agriculture in the Classroom or National Farm to School Network (National Agriculture in the Classroom, n.d., National Farm to School Network, n.d.). With the gap in people participating or working in an agriculturally based lifestyle, agricultural communicators are left to explain agriculture to the public through agricultural literacy efforts.

To address the need for improved agricultural literacy without hands-on experiences, we sought to use different perspectives and photographs to address and teach agricultural literacy concepts.

How It Works

In a New Mexico State University photography in agriculture course, we dedicated one lecture period to highlighting agricultural literacy, its importance, and connection through photography to students near the end of the fall 2024 semester. When the lecture period started, students completed a three-minute warm-up exercise by writing down their thoughts on three given prompts (a) define ag literacy in your own words; (b) why do you think agriculture literacy is or is not important; and (c) do you have previous experience with agriculture literacy? We asked students to share their thoughts with the class before continuing with the exercise.

Following their warm-up, we prepared a slide presentation to discuss three main points about agriculture literacy and perspectives and how the two work together in photography. The definition and common modes of improving agriculture literacy were established, and students discussed their thoughts and compared their previous definition with the given definition. Students were then asked for their personal definition of perspective and how it pertained to photography to further emphasize the course concepts. After the short lecture, we provided a sheet of paper with a large box divided into four sections on either side of the paper.

Each box was labeled (i.e., 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b) with a corresponding, labeled photo shown in the slide presentation. One photo was shown at a time; however, we adapted the game

Close up Pics: Zoom out (Explorify, 2021) to fit this exercise. Usually, this photography game starts with over-zoomed pictures for students to try and guess the subject. The zoomed picture slowly zooms out to expose the full photographed item (Explorify, 2021). Using this to emphasize perspective, the initial image we showed to students was a close-up image of a larger agricultural scene. The photos labeled "1a" and "1b" were the same; however, the perspective differed. The "A" version of each photo was cropped closer, only showing a specific part of the photo, compared to the "B" version, which showed the entire picture. We asked students to look at each image. After each initial picture was shown, we asked students to write a story connected to agriculture from their perspective. Students wrote stories after both the zoomed and full image was shown. The goal of this exercise was to change each photo's perspective by limiting the subject and the areas for the eye to look while also exposing students to familiar and unfamiliar agricultural scenes. Students shared their stories after each group of pictures. They evaluated the changes in story perspectives as they related to agriculture literacy.

Results to Date

An anonymous exit survey was given to the students at the end of the class to assess how this activity impacted their knowledge of agricultural literacy and perspectives in photography. Many of the students in the course had backgrounds in agriculture, but interestingly only one to two students considered themselves to have experience in agricultural literacy. Students described instances of how they learned that *perspective matters* when taking photos and explaining the story. Students also learned that *photos tell a story, but different opinions determine the story and can change due to different perspectives*. After going through the activity, many students expressed that they understood the *importance of agriculture literacy* and how to *explain agriculture to the public.* They also expressed how they would *consider and use different perspectives in photography* to help in sharing information, especially agricultural stories.

Advice to Others

Based on our direct approach to teaching agricultural literacy, students appreciated the use of the activity to teach about the complex topic. Providing multiple perspectives and asking for personal perspectives from students allowed them to feel connected to the topic. However, students also outlined ways to improve the experience and activity. These changes included *allowing more time for students to process and elaborate when writing their stories for each photo*. When completing this activity, some students felt rushed and failed to provide key details within their stories to explain the photos fully. To keep within the course time frame, we suggest that instructors limit the number of images shown and instead focus on one to two highly impactful images. Students also suggested to reverse the order in which photos were shown. Start with the larger wide-view photo, then focus on the small details. Students suggested that *writing a story from a broader view is more straightforward than narrowing their thoughts to a more specific, detailed story*. We suggest this method only after showing zoomed images.

Costs & Resources Needed

There are no costs associated with this idea. The only resources needed are high quality images depicting various agricultural scenes for agricultural literacy and printed sheets to document responses. Free agricultural images can be sourced from open-source sites like Pexels or Unsplash. Deeper interactions could also be garnered by using images taken by students or instructors if desired.

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