

Using a Livestock Branding Project to Promote Student Engagement

Introduction

Student engagement is a fundamental component of the instructional process (Estep & Roberts, 2013; Phipps et al., 2008). To effectively engage students in the learning process, it is vital that instructors use a range of approaches (Phipps et al., 2008). One such approach is the use of relevant, meaningful projects that allow for the application of knowledge. Students often value projects and perceive them to be an engaging component of their educational experience (Estep & Roberts, 2013). In the context of university-level agricultural coursework, projects can be used within numerous disciplines, such as animal science. Within the realm of animal science, the use of a cattle brand development project for a university beef cattle herd is a practical learning opportunity for undergraduate agricultural students.

In agricultural production enterprises, the development of a distinguishable, recognizable brand is an essential component of personalized identification. The importance of a brand relates across the spectrum for a wide range of entities involved in agriculture, from universities offering agricultural degree programs to companies that market agricultural goods and services. It is critical that such agricultural industry stakeholders foster specific identities that others can immediately recognize. This notion is particularly crucial within the beef industry, since the brand is the single most important identification tool used for any family farm, ranch, operation, or owner involved in beef cattle production.

It is important for students to learn the processes associated with developing a brand for future endeavors that may take place both outside and inside of the agricultural industry. To develop an appropriate brand that would set students or their career aspirations apart from others, an important question must be considered: How does one properly develop and build a brand? In the context of branding for the beef industry, several considerations must be made to adequately answer this leading question, including: (1) the presentation behind the brand, (2) the physical materials used to build the brand (i.e., metal), (3) the actual brand advertisement, (4) the brand placement, (5) the type of brand that will be used (i.e., fire or freeze branding), (6) marketing aspects of an enterprise, (7) trademarking, and (8) the long-term implications of using a particular brand. These considerations lend themselves well to serve as components of a project designed to engage undergraduate agricultural students.

Assignment Overview and Implementation Details

In 2021, undergraduate agricultural students established the Southern Arkansas University (SAU) Collegiate Cattlemen's Association. A component of this newly-established student organization was to initiate the process of branding the organization and marketing it to prospective members. Association members were tasked with developing their version of a brand for potential use in the SAU beef cattle herd. They designed brand ideas based on the following considerations:

- 1) Future representation of this herd in purebred cattle sales;
- 2) The type of metal needed specifically for both fire and freeze branding with placement being located towards the shoulder of the animal;
- 3) Future trademarks and copyrights with federal cattle brands that have already been trademarked while also not interfering with any SAU Athletics brands;
- 4) Ensuring the proposed brand design represents SAU and can be recognized as being part of the university for future production of beef cattle on the SAU Farm.

Once the proposed brands were submitted to the lead author, the brands were anonymously reviewed by the SAU Cattlemen's Association members, the student organization advisor, SAU beef cattle herd managers, and the department chair. Everyone who was present provided their critiques based on the above-mentioned criteria. Common critiques included: (1) not considering the metal the brand will be made out of, (2) the sizing of the brand due to its placement on the animal, (3) overcomplication of the design, and (4) concerns regarding infringing on federal brand trademarks that have been in place for centuries. All concerns were noted by the meeting attendees, thus leading to an open discussion of ideas that took the most positive concepts of all brands that were of similar design.

Afterward, a final brand design was approved and sent to another student in the SAU Department of Agriculture who was not involved in the SAU Cattlemen's Association (i.e., the second author). This student was enrolled in an agricultural mechanics course taught by another faculty member in the department (i.e., the third author). She was tasked with using computer-aided design (CAD) software to create a physical prototype of the final brand design. Afterward, she used the department's computer numerical control (CNC) plasma cutting table to cut the initial prototype from a sheet of $\frac{1}{4}$ "-thick mild steel.

Once the initial prototype was cut, it was re-evaluated by the same individuals who previously reviewed the designs. Their most-common critiques included the overall size (width and height) of the brand, letter thickness of the brand, and certain tight connecting points between letters that could possibly affect the transferability and readability of the brand. After taking into consideration these critiques, the student re-designed the brand with faculty member guidance to ensure proper width, height, and letter thickness to give proper transfer of the brand to material selected for the prototype. The student used the CNC plasma cutting table to cut the re-designed prototype from a sheet of $\frac{1}{4}$ "-thick mild steel. Afterward, two faculty members in the Department of Agriculture used an oxy-acetylene torch to heat the brand for testing on both wood and leather pieces to ensure appropriate heat transferability. They found that the re-

designed prototype was suitable for use and proceeded to work with university administrators to initiate the federal trademark process.

Summary, Limitations, and Recommendations

This project was a unique experience for stakeholders within and around the SAU Department of Agriculture. This project provided students representing various agricultural disciplines with opportunities to apply knowledge from academic resources and experiences to real-world beef cattle management. Moreover, this project brought multiple university-level agricultural stakeholders together to yield a useful final product that will impact beef cattle management at SAU for years to come. However, it should be noted that there were some challenges and limitations regarding this project:

- 1) Students were unable to participate in the federal trademark process as it moved forward;
- 2) The time commitment to the design phase of this activity depends highly upon students' and faculty members' knowledge and skills regarding using the CAD software; and
- 3) Testing a brand design can be challenging and burdensome at times, as it could be expected that multiple brand designs may need to be prepared when testing different variables for suitability (i.e., letter size, material thickness, etc.). One should expect to make several edits to the design in the CAD software. Consequently, brand designs may be cut several times as needed.

These challenges and limitations can yield the consumption of both time and consumable resources such as metal. Despite such, it is recommended that agricultural faculty at other universities explore similar opportunities to engage students in project-based learning. While project-based learning can result in significant time and resource commitments, it can also help to engage students deeply in the learning process (Phipps et al., 2008). Doing such may very well help students engage in relevant, real-world projects while helping them to leave a lasting legacy on their undergraduate institution.

Figure 1

Sample Student Brand Designs



Figure 2

Final Brand Design and Transferred Fire Brand to Wooden Test Piece



References

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Phipps, L. J., Osborne, E. W., Dyer, J. E., & Ball, A. (2008). *Handbook on agricultural education in public schools* (6th ed.). Thomson Delmar Learning.

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