Improving the Online Accessibility of the Cal Poly Dairy Science Department

A Senior Project

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the Faculty of the Dairy Science Department

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of the Requirements for the Degree

Bachelor of Science

by

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ABSTRACT

The objective of this project was to provide the Cal Poly Dairy Science Department with additional tools to recruit new students, maintain current students’ interest, and update alumni on Department happenings. This was accomplished through initiating an update of the Department website and developing a social media presence through a Facebook page. In addition, a photo shoot was organized to submit a photo for the *Holstein World* 2014 Collegiate Photo Contest, which was later used as a promotional tool.

The update of the Department website was made possible through working with Cal Poly’s Information Technology Services, Cal Poly Web Services and the Dairy Science Department Chair and staff. The Facebook page was created, content was added, a network of followers was established, and posts were generated. As for the photo shoot, the theme was thought of and the students, photographer, location and cattle were selected. In addition, the photo shoot was arranged, the best photo was selected and then it was submitted to *Holstein World* for their critique.

These efforts resulted in an improved Department website that is more consistent with the Cal Poly brand, a Facebook page that is engaging current and prospective students, as well as alumni, and a photo on the cover of *Holstein World*. 
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INTRODUCTION

Cal Poly is often considered to have one of the best Dairy Science departments in the nation. Students are offered a hands-on experience and are gaining practical knowledge in the fields of dairy husbandry and processing. Cal Poly Dairy Science students graduate ready for a career in the dairy industry. However, what Cal Poly Dairy Science has to offer prospective and current students is not widely known. There is a need for accessible tools that students may use to learn more about the department, coursework, requirements and opportunities. Two of these tools are a current and user-friendly website, and a Facebook page.

Currently, the department has an outdated and poorly developed website. Since its last update in 2010, much has changed with the department and with the university’s websites. As it stands now, the Cal Poly Dairy Science website does not match the style and organization of the majority of Cal Poly affiliated websites. In addition, the current website also shows outdated information to its viewers. A lack of usable information coupled with a lack of uniformity with the university contributes to a website that is not a desirable, functioning recruitment tool. There is an apparent need for a newly designed, current website for the Dairy Science department.

Furthermore, the department does not have a social media presence. To compete with other universities in recruiting the best students available, it is important to use all possible resources. Establishing a Facebook page is an easy and free way to recruit prospective students, maintain connections with alumni and industry supporters, and keep current students up-to-date on department news.
The issue of an outdated website will be solved in stages. The first stage includes initiating the move of the website from the previous Cal Poly system to the current Drupal Web Content Management system, which requires working with the department, Cal Poly Technology Services and Cal Poly Web Services. In regards to the Facebook page, the author will create the page, establish a network via “likes,” and add content to the page in the form of photos, department information and upcoming events. A key focal point of the Facebook page will be a photo taken for the Holstein World 2014 Collegiate Photo Contest. This photo, featuring well-rounded Cal Poly Dairy Science students, will serve as a recruitment tool when integrated into social media.

The author will work closely with project advisor Dr. Stan Henderson, University Web Services and University Technology Services, and the Department Chair, Dr. Charlie Crabb, in order to create the most useful resources for the department. The focus of this project is to keep prospective students, alumni and current students aware of all that the department has to offer, via an updated website and a Facebook page.
LITERATURE REVIEW

Review of Cal Poly Dairy Science Website

The current Cal Poly Dairy Science Department website has gone without an update since May 12, 2010, as cited on the home page (Cal Poly State University, 2010). The existing website has outdated links and is difficult to navigate. Also, in its current state it is not consistent with the University’s brand, as the majority of Cal Poly’s websites have moved to Drupal (Cal Poly’s Web Content Management System) and have been redesigned with a new theme (Cal Poly State University, 2014c,d). In comparison to other University sites within the College of Agriculture, Food & Environmental Sciences, the Cal Poly Dairy Science Department website is not being used to its full potential as a resource for current students (Cal Poly State University, 2014a). In comparison with websites from other nationally recognized Dairy Science programs, the current Cal Poly Dairy Science Department website does not measure up in terms of a modern look that is consistent with the university’s brand and in providing industry resources (University of Wisconsin, 2014).

Website as a Recruitment Tool

Websites have become a prospective student’s main way to learn about an institution, next to campus visits. To be an effective recruitment tool, universities should focus on website usability and relationship marketing (Pegoraro, 2006).

Website usability is defined as the concern with “how easy or difficult a website or web-based software is to learn and use.” Having a site that is easy to use is key when institutions only have 7 to 20 seconds to get a student’s attention. Furthermore, if students can’t find the information they seek in three clicks, they are bound to leave the site.
Offering prospective students a site with few navigational problems increases the likelihood that they will see the desired content, and universities will have a competitive edge in the recruitment marketplace (Pegoraro, 2006).

Some benchmarks for a user-friendly website include: contact information, loading speed, functional uniqueness, and ease of navigation. Satisfying the user’s need for usability allows them to find the information they want and provides a positive experience, which can foster a relationship with the institution and the student (Pegoraro, 2006).

When used to its full potential, a website serves as a marketing tool for institutions. Keeping in mind that the target market is prospective students, relationship marketing can be used. Relationship marketing is defined as, “all marketing activities directed towards establishing, developing and maintaining successful relational exchanges.” An increase in competition among universities makes relationship marketing techniques valuable in the recruitment process (Pegoraro, 2006).

In serving students and their needs, institutions should keep in mind what students want from a university website. It has been found that students value information on tuition, admission criteria, student activities, internships and scholarships, among other topics, present on a university website. In regards to specific departments, students want information about faculty, courses available and a way to email a professor on the website. Students also shared what they disliked about university websites, and cited long download times, difficulty finding information, and sites being “too fancy” (Pegoraro, 2006).
Websites serve as an opportunity for institutions to share what they have to offer to prospective students. If institutions are providing the most relevant information in an easily accessible way, recruitment can be positively influenced.

**Benefits of Social Media Presence**

Social media is a cost-effective way to build a brand. It offers companies and organizations a platform to strengthen their reputations and provides a forum for communication with target audiences. Social media gives organizations the chance to reach their audiences in a conversational way, as it is meant to foster discussions and collaborative two-way communication online. Additionally, social media allows for real-time communication so audiences can receive news as it happens and organizations can address concerns in a timely manner (Edosomwan et al., 2011).

The true power of social media is its ability to communicate an organization’s message to hundreds or thousands of people at a time. As cited in Andrew Macarthy’s book *500 Social Media Marketing Tips* (2014), 72 percent of adults in North America are using social networking sites, with 78 percent of 30 to 49-year-olds and 89 percent of 18 to 29-year-olds. Social media messages influence awareness, information acquisition, opinions and attitudes of target audiences. It is able to do this through enabling organizations to talk to their audience, and members of the audience to talk with one another. Members of the audience talking with each other is what makes social media truly unique (Mangold and Faulds, 2009).

Mangold and Faulds (2009) view audiences talking to one another as an extension of word-of-mouth communication, but on a much larger scale. Social media allows
organizations to communicate with their audience in the way they may communicate with each other, by talking with them and not at them (Mangold and Faulds, 2009).

**Effective Facebook Marketing Strategies**

A Facebook Fan Page is a valuable tool for any business or organization as it offers them a variety of marketing opportunities. Macarthy (2014) highlights effective page posting strategies which include posting often, keeping updates short and timely, using photos for higher engagement, asking questions and responding to users individually.

Posting often and consistently keeps audiences engaged. Posting one to three updates a day is a good target, but at the minimum posts should occur a couple times a week. More posts mean more opportunities for engagement because it increases the likelihood that an organization’s posts will appear in audiences’ News Feeds. However that being said, it is important to consider quality, not just quantity. It is important to focus on building a loyal audience that will continue to be engaged and engage their friends as well (Macarthy, 2014).

In regards to post content, updates should be short and timely. The amount of Facebook users who mainly use their mobile devices to log on is increasing. To keep this group engaged, status updates should be short. A benchmark for post length is 80 characters or less, as they receive 27 percent higher engagement rates. Additionally, posts should be timely. Organizations should reply to comments on their page as soon as possible as it is a chance to further conversation and keep audiences engaged (Macarthy, 2014).
Photos are an additional way to maintain connections. Posting a photo album, picture or video creates about 180, 120 and 100 percent more engagement, respectively. Photos should be high quality, at a minimum of 200 by 200 pixels (Macarthy, 2014).

Another way to engage audiences is by asking them questions and responding to them individually. According to a KISSmetrics study cited in Macarthy’s book (2014), “questions receive 100 percent more comments than ordinary text posts.” Organizations can start discussions by posting relevant questions on their pages, like what followers’ preferences or opinions are about organization-related products or events. When audience members respond to these questions, the page administrator can add a personal touch by replying to them individually. This can be done through the @username function, by typing @ and the name of the person, then selecting their name from the dropdown list (Macarthy, 2014).
MATERIALS AND METHODS

Holstein World Photo Contest

Brainstorm Theme. The author met with Mr. Rich Silacci, Cal Poly Dairy Manager, to discuss ideas for the photo’s theme. The theme of the overall Holstein World 2014 Collegiate photo contest was “College, Cows, Careers” (Holstein World, 2013). After visiting with Mr. Silacci, the author decided Cal Poly’s photo would feature Dairy Science and Dairy Club students dressed as dairy industry career pathways, and students representing school pride. The photo would also feature a cow and calf from the Cal Poly Dairy.

Student Selection. The author reached out to third and fourth year students who were actively involved in the department and Dairy Club. The author based the students in the photo around the chosen career pathways: agriculture journalist, A.I. (Artificial Insemination) technician, dairy construction manager, creamery operator, veterinarian, banker, animal nutritionist, and herdsman. The author chose students who had an interest in the chosen career pathways and that would have the necessary clothing and accessories to properly represent those pathways. Ten students were featured in the photo, which included a student representing each career pathway plus two Dairy Club officers representing Dairy Club and Cal Poly, as part of the “College” requirement in the overall theme.

Photographer. The author did not want the photo to come at a cost to the Department, so the photographer was chosen out of a small pool of Cal Poly students and faculty willing to volunteer their time. Mrs. Megan Silcott, director of the Brock Center
for Agricultural Communication, was chosen because she was available for the photo shoot date and had the most experience photographing students and animals.

**Location Selection.** The author and Mr. Silacci brainstormed a list of on-campus locations that would produce a photo which closely followed the theme of “College, Cows, Careers.” The choices were the Cal Poly baseball field, in front of the Grand Avenue campus entrance and at the Cal Poly composting unit, which overlooks the dairy. Ultimately, the composting unit was chosen because it featured a view of the greater part of campus and it would be the most efficient location to have cattle.

**Cattle Selection, Preparation and Transportation.** The author selected the cow and calf for the photo with the help of Mr. Silacci and Dairy Science student Dominic Assali. Mr. Silacci recommended that cow number 2414 be used because she was friendly and photogenic. Dominic and the author chose a calf that wasn’t too large so that it would be easily picked up by the student posing as the herdsman in the photo. As for cattle preparation, the author washed the cow the afternoon of the photo shoot and Dominic clipped her front end, which is all that would be featured in the photo. Dominic also transported the cow and calf to the photo shoot site with a Cal Poly truck and trailer.

**Photo Shoot.** The author arranged for the photo shoot to take place on October 21, 2013 at 4 p.m. The photo shoot participants were sent emails and text messages with the details of the shoot, as in what they should wear and the location, prior to the event. The author ensured the extra supplies were at the shoot, which included a ladder for the photographer to stand on, Cal Poly cheese for the creamery operator, a halter for the cow, and a shaker box and palm pilot for the nutritionist. The author staged the participants
with the help of the photographer. The author also helped the photographer evaluate the photos during the shoot to see if different angles or staging was needed.

*Photo Selection and Submission.* The author retrieved the photo files from the photographer and evaluated them. The final photo was selected by the author based upon staging, animal appearance, participant appearance, camera angle and lighting. Prior to submission, the photo was edited by Brock Center Associate Jordan Dunn. The author electronically submitted the final photo, along with an essay explaining the photo, to *Holstein World* Associate Editor Parker Welch.

Figure 1. Sample copy of the final photo.
Initiating Update of Department Website

Initial Contact with Information Technology Services. The author contacted Tara Smith with Information Technology Services (ITS) to discuss options for moving the Cal Poly Dairy Science Department website over to the Drupal Web Content Management System (Smith, 2014). After learning the different ways that the site could be moved, either by the site owner or by ITS, the author decided having ITS perform the migration would be the most efficient way to initiate the update of the Department website (Cal Poly State University, 2014b).

Department Chair Approval. In order for the original Department site to be migrated over to the Drupal system, ITS needed a copy of the original site’s files. Since the author was not the site owner, the author needed permission from the Department Chair, Dr. Charlie Crabb, to retrieve the files from Cal Poly Web Services (DeBrum, 2014). The author contacted Dr. Crabb via email seeking his approval. Dr. Crabb granted his approval and sent an email to the author and Dustin DeBrum, Manager of Web Services, confirming the permission to release the original site’s files to the author (Crabb, 2014). In addition, the author also sought the Department Chair’s approval to cover the cost of the site migration by ITS, which was granted (Crabb, 2014).

File Acquisition. Once granted access to the original site’s files by Dr. Crabb, the author made contact with Dustin DeBrum to retrieve the files. He offered to put the files on a flash drive provided by the author. The author scheduled a meeting with Dustin to retrieve the files (DeBrum, 2014). Once the author had the files on the flash drive, the author delivered the flash drive to Tara Smith at ITS (Smith, 2014).
Hiring Student Employee. The author gave Tara Smith the contact information for Norah Kennedy, the Department administrative support coordinator, so Tara and Norah could arrange for the hiring of ITS student Chris Hartley to perform the site migration (Smith, 2014).

Communication with Chris Hartley. The author addressed Chris Hartley’s questions during the site migration process. The author also checked on the status of the migration process, and along with Dr. Crabb, granted approval to publish the migrated site (Hartley, 2014; Crabb, 2014).

Creation of Department Facebook Page

Create Facebook Account. The author created a page for the Department and titled it “Cal Poly Dairy Science Department.” The author classified the page as an “institution” and chose the “education” category. The author established herself as the page administrator and adjusted the page’s privacy settings. Under the privacy settings, only the author can post to the page and tag photos. Also, the profanity filter is set to strong, so any profanity will be blocked from the page.

Adding content. The author first added basic content to the page, like a profile picture, cover photo, contact information and “about” information. The “about” section includes a small blurb about the Department, the Department’s mission and a detailed description of the Department and what it offers to students. The author used information from the Department website to fill out this section (Cal Poly State University, 2010). After adding the basic content, the author made photo albums for the page and added photos to them. The albums were Cal Poly Dairy, Cal Poly Dairy Judging, State FFA Finals 2013 and Spring Banquet 2013. The majority of the photos were taken by the
author, but some were provided by Dr. Stan Henderson and the Brock Center for Agricultural Communication.

**Establish a Network.** The author suggested the Department page to her already existing network of Facebook friends, which includes many current Cal Poly Dairy Science students, alumni and prospective students, by inviting them to “like” the page. The author also shared the Department page on her personal Facebook page asking for likes and shares.

**Create Several Posts.** The author created several posts: a welcome post, a post thanking page followers for their support, a “Throwback Thursday” post, a post asking followers about their favorite Cal Poly Dairy Science memory, photos of the Western Regional Dairy Challenge contest and the contest results, and a photo of the Cal Poly team that placed first at the 2014 Western Classic Dairy Show judging contest.
RESULTS AND DISCUSSION

This project has produced an improved Cal Poly Dairy Science Department website, a newly established Facebook page, and the winning submission of the 2014 *Holstein World* Collegiate Photo Contest. Each of these aspects will contribute to the success of the Cal Poly Dairy Science Department. The improved website is more consistent with the Cal Poly brand, the Facebook page is engaging alumni and current and prospective students, and the winning photo on the cover of the *Holstein World* increases the Department’s exposure.

The migration of the original Cal Poly Dairy Science Department website over to the Drupal Web Content Management System streamlines the Department website. It is now consistent with the look and feel of the calpoly.edu website and the nearly 100 other Cal Poly sites that have made the switch over to Drupal (Figure 2).

![Figure 2. Screenshot of the new website’s homepage.](Image)
The author recognizes there is still room for improvement, as the site content needs to be updated. This is something that will be addressed in the future but is beyond the scope of this project. That being stated, the Drupal system includes a basic web page editor that will make future updates simple.

The Department’s newly established Facebook page has allowed for engagement with over 400 followers and their networks of friends (Figure 3). Within the first day the page was published, there were 260 likes, showing that there is an audience that is interested in the Department and its happenings. Followers have access to department updates and photos of students engaging in Learn by Doing activities (Figure 4). Additionally, the Department is able to engage with its followers in real-time and generate discussions. The Facebook page is an easy and cost-effective way to promote the Cal Poly Dairy Science Department and its students.

![Figure 3. Screenshot of Facebook profile photo, cover photo and number of likes.](image-url)
Having a Facebook page also gives the Department insights on their followers and level of engagement. As shown in Figure 5 below, 71 percent of the people engaged with the page are women and 29 percent are men. Women aged 18 to 24 are 22.9 percent of people engaged, and men aged 18-24 are 12.8 percent of people engaged. These numbers reflect the importance of catering to the 18 to 24 age group, as the people within it represent current and prospective students.
Figure 5. Screenshot of people engaged through Department Facebook Page.

Data from Facebook also shows that photos reach and engage a higher number of followers than status updates do, as shown in Figures 6 and 7 below.

Figure 6. Screenshot of post types and their levels of reach and engagement.
The photo produced through this project was chosen by *Holstein World* to represent the theme of their 2014 Collegiate Photo Contest: “College, Cows, Careers.” The photo was featured on the cover of the magazine’s December 2013 Issue (Figure 8). Being awarded the cover of *Holstein World* is an honor for the Cal Poly Dairy Science Department. Additionally, it will benefit the Department’s recruitment efforts and promotion of their cows and students, as the magazine is distributed domestically and globally to breeders and dairy industry members.
Figure 8. Cal Poly’s winning photo on the cover of *Holstein World*. 
CONCLUSION

The conversion of the previous Cal Poly Dairy Science Department website to the current Cal Poly Drupal system, and the creation of a Dairy Science Department Facebook page, will serve the department well. The improvement of the website and the established Facebook page are two more usable tools the department has at their disposal to recruit and inform prospective students, while maintaining connections with current students and alumni. By aligning the website with Cal Poly’s current brand standards via the Drupal system, the author has initiated a positive change for the department. The new system is more user-friendly and easier to update and maintain. With the creation of a Facebook page, the author has established a platform on which the department can directly connect with its audience in an easy, visible, creative and fast way.

These two tools, the transformed website and the Facebook page, will be used as recruitment and promotional tools for the Cal Poly Dairy Science Department. Having easily accessible and updatable resources will allow administrators to give students and alumni the most up-to-date information about the dynamic things the department and its students are accomplishing. A distinguished program like the Cal Poly Dairy Science Department needs an online and social media presence that reflects its success. With an improved website and a Facebook page, others are able to witness what the program has to offer them and how it will continue to positively impact students for generations to come.
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