I. Program Description

The Agricultural Communication and Journalism Program prepares students for professional communication careers in the agricultural and environmental industries. The agricultural production and processing industry is faced with issues of image, ethics, and survival. American agriculture is scrutinized by consumers, government agencies, and environmental interest groups. The greatest deficiency in agricultural production is the effective communication of ideals and standards to wide and varied audiences. Students in the major learn to communicate about agricultural issues to audiences that include consumers, farmers, legislators, commodity groups, and government agencies. Students in agricultural communication and journalism develop skills in media writing, graphic design, sales, marketing, video and audio production, photography, technical writing and scientific writing. Graduates of this option are employed in: (1) communication or management positions with the numerous commodity or special-interest associations in agriculture and related fields; (2) communication positions in agricultural extension and research information departments of land-grant universities, the U.S. Department of Agriculture, state departments of agriculture; (3) advertising and public relations positions with agribusinesses, firms or commodity associations; and (4) media positions involved in reporting on agriculture, agribusiness and environment issues at radio stations, television stations, magazines and newspapers.

II. Degree Offered

Students earn a bachelor’s of science degree in Agricultural Communication and Journalism and a bachelor’s degree in Journalism as dual majors with the Department of Journalism and Communication (JCOM). Students concentrate their JCOM coursework in one of three emphasis areas:

1. Public Relations
   A public relations/corporate communication emphasis trains students how to manage the public perceptions of an organization, business or person. Students learn writing, image building, media relations, event planning, web communications, social media and much more.

2. Broadcast
   A broadcast/video news emphasis prepares students with the skills and knowledge necessary for a career in radio, television and other communications industries. Students gain hands-on experiences working with technology used in the broadcasting field.

3. Print
   A print emphasis instructs students how to find, collect and report the news. Students typically find careers writing, editing, selling or designing for newspapers and magazines.
III. ACAJ Program Mission Statement

The mission of the Agricultural Communication and Journalism Program is to produce graduates who possess communication skills and a strong background in agricultural sciences that translate into the workplace.

IV. Alignment of Program Mission with Department Mission

The Agricultural Communication and Journalism Program prepares graduates to communicate about agricultural and environmental issues. Students learn to use technology, such as broadcasting equipment, digital cameras, graphic design software, website design software and social media tools, to disseminate news. Graduates can disseminate information that meets the needs of producers, consumers, government officials and the media.

V. Program Goals

Program Goals

- To promote a broader understanding of agriculture among a diverse national and global citizenry.
- To demonstrate and apply effective written, verbal, listening and visual skills in communication related to agricultural and environmental sciences.
- To demonstrate the ability to work in a professional communications setting through experiential learning (i.e. internships, work experience, student organizations).

Operational Goals

1. Increase enrollment in the program by 10% (2 students) each academic year.
2. Strengthen recruiting efforts targeting traditional and non-traditional markets for agricultural communication and journalism.
3. Enhance recruiting efforts and collaborative programs targeting four-year colleges and community colleges.
4. Collaborate with Utah FFA to assist with the Ag Communication Career Development Events (those students are already interested in the major’s activities).
5. Have Agricultural Communication Club members participate in the CAAS Week activities, promoting the club and academic program.
6. Obtain an 80% retention rate for first year students each academic year.
7. Offer professional development opportunities that interest students through Agricultural Communication Club activities, National Agricultural Communicators of Tomorrow and professional organizations.
8. Advise students throughout their internship experiences.
9. Require that students enrolled in ASTE 1710 meet with their academic advisor.
10. Provide experiential learning experiences in ASTE 1710 that show students what they can do with a degree in agricultural communication and journalism.

11. Develop an advisory board of professionals employed in agricultural communication and journalism who provide insight about curriculum and industry trends by 2015.

12. Identify alumni from the Agricultural Communication and Journalism Program who have a career in the field.

13. Identify professionals (not graduates from the program) who have expert knowledge in the program field.

VI. Learning Objectives

To meet the mission of the program, the Agricultural Communication and Journalism (ACAJ) Program will offer a varied program of study with the following objectives:

- Possess a high degree of agricultural literacy and an adequate reservoir of skills and knowledge in agricultural subjects to meet the need of the agricultural communication profession.
  - Demonstrate in-depth technical knowledge in food, agriculture or the environment by taking these required agriculture courses: LAEP 1030, ADVS 1110, NDFS 1020, APEC 3010, FCSE 3030, PSC 4000 and ASTE 2900.

- Explore career opportunities in agricultural communication and journalism.
  - Interview an agricultural communications professional and deliver presentation about the career in ASTE 1710.
  - Attend guest lectures by professionals with agricultural communication careers, specifically in ASTE 1710 & ASTE 2830. Students write a reflective paper about the guest lecture and connect what was learned to concepts in their class.
  - Create and implement a sales call plan to sell a service or project to a potential customer in ASTE 2830.
  - Shadow agricultural communication professionals at the National Association of Farm Broadcasting Convention and Ag Media Summit.
  - Complete an internship related to the agricultural communication industry by enrolling in either ASTE 2250 or ASTE 4250.

- Remember the trends and principles (sales, design or writing) used in agricultural communication and journalism.
  - Develop a crisis communication plan as an in-class activity during ASTE 1710.
  - Practice media relations training about an agriculture issue during ASTE 1710.
  - Complete the design analysis project in ASTE 3090 to evaluate design principles used in 30 pieces of marketing.

- Demonstrate written, verbal and visual communication about food, agriculture or environmental topics.
  - Interview sources for information used to communicate about agricultural, food or environmental topics.
  - Design visual communication, including marketing materials, graphics, photos, websites and videos.
• Deliver presentations.
• Write business and technical documents for different purposes and audiences.
• Understand the meaning of professionalism.
  • Meets deadlines
  • Affirmation of the individual's responsibilities as either a producer or consumer of information in a democratic mass media age
Plan for Measuring the Achievement of Degree and Program Objectives

We assert that communication skills as well as an understanding of the roles and responsibilities of both the mass media and individuals, whether as producers or consumers of information, are essential to mutual understanding and individual freedom in the information age. Therefore, we seek to foster the development of agriculturally literate communication professionals.

Measures of program assessment will include the completion of a rigorous plan of study with a varied list of required and elective courses, entrance and graduation requirements, student academic career portfolios, capstone course requirements with the option of an internship, exit interviews with an emphasis on program development and other measurements which agricultural communication and journalism faculty is willing to develop as the program grows cooperatively within the framework of the Department of Journalism and Communication as well as the School of Applied Sciences, Technology and Education. For specific descriptions of measurement and assessment, refer to the next section of this document “Expected Standards of Performance”.

The faculty advisor is also a member of the Academic Programs Learning Community, which is a committee of the Association for Communication Excellence (ACE) in Agriculture, Natural Resources, and Life and Human Sciences. The academic program learning community meets annually to focus on undergraduate and graduate degree programs in agricultural communication or agricultural journalism. The purpose of this learning community is to provide professional improvement in teaching, assessment, and tenure/promotion topics. The Academic Programs Learning Community administers a survey each year to all agricultural communication programs to share their programs’ news, challenges and trends. These results are shared during the ACE Conference. This information has helped in designing Utah State’s agricultural communication curriculum and assessment tools.
Formative and Summative Assessment Measures

Coursework
The Agricultural Communication and Journalism major is designed to develop the needed background knowledge of the agricultural industry as students matriculate through the coursework in the School of Applied Sciences, Technology and Education and JCOM Department.

Coursework covers topics in the following fields: animal science, biotechnology, plant science, agricultural business, textiles, agricultural sales, nutrition, landscape architecture, agricultural leadership, technical and business communication, graphic design, web design, agricultural communications, journalism and communications with an emphasis in public relations, print or broadcast.

The agricultural communication courses use grading rubrics to evaluate major writing, oral or visual communication assignments, such as fliers, website, senior project poster, senior project presentation, photo composite, flier, brochure, email, memo, technical description, technical instructions, resume, employment interview or sales call presentation. Copies of the graded rubrics and student assignments are kept for assessment.

Pre-Test and Post-Tests
A pre-test and post-test are administered to students enrolled in ASTE 2830, ASTE 3050 and ASTE 3090 to measure students’ change in knowledge of the skills and principles used in agricultural communication professions.

Entrance/graduation requirements
All graduates from the department must satisfy requirements for the basic core curriculum and meet the following minimum requirements: (1) Grade point average must be 2.50 or higher in all courses required for the major; (2) Courses required for the major may be repeated only once to improve a grade; (3) Courses required for the major may not be taken for pass-fail credit.

Portfolios
Student portfolios are to be developed by all Agricultural Communication and Journalism majors. Portfolios will be introduced in the introductory course ASTE 1710 and assignments will be made to be appended to the portfolio during the career of the student within the context of Agricultural Communication courses. Online portfolios will be created and presented in the capstone course, ASTE 4900.

Student portfolios collected from internship experiences will be assessed using a rubric specifically designed for the agricultural communication and journalism internship program.

Exit interviews
All graduates in Agricultural Communication and Journalism Program will complete an exit interview in connection with ASTE 4900 – Senior Project. This strategy will be useful for program and student assessment.
1. Agricultural Communication and Journalism faculty prepare before the semester specific projects for all students as they complete their capstone projects/internships.

2. University-wide questions should be gathered from the appropriate USU assessment program(s).

3. Agricultural Communication and Journalism faculty will plan and update the Agricultural Communication program accordingly after the conclusion of the seminar.

**Student Awards and Recognition**
The agricultural communication program will track student success in nationwide competitions sponsored by organizations such as the National Agricultural Communicators of Tomorrow, Livestock Publications Council, National Farm Broadcasting Convention and HerdMark.

**Job Placement/Graduate School Acceptance & Completion**
The agricultural communication program will track agricultural communication graduates through LinkedIn, Facebook, personal contact and university alumni records.

**Further program and student assessment**
Agricultural Communication and Journalism faculty should develop additional measurement methods for determining the satisfaction of employers, placement success, and student satisfaction of the program post-graduate. These instruments are to be developed by Agricultural Communication and Journalism faculty.
## Course Map

<table>
<thead>
<tr>
<th>ACAJ Program Learning Objectives</th>
<th>ACAJ Core &amp; Directed Elective Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possess a high degree of agricultural literacy and an adequate reservoir of skills and knowledge in agricultural subjects to meet the need of the agricultural communication profession.</td>
<td>ASTE 1710</td>
</tr>
<tr>
<td>Explore career opportunities in agricultural communication and journalism.</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate knowledge of skills, trends and principles (sales, design or writing) used in agricultural communication professions.</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate written, verbal and visual communication about food, agriculture or environmental topics.</td>
<td>X</td>
</tr>
<tr>
<td>Gain experiences in leadership styles and planning, developing, conducting and evaluating a team service-learning project.</td>
<td>X</td>
</tr>
<tr>
<td>Understand the meaning of professionalism.</td>
<td>X</td>
</tr>
</tbody>
</table>
Agricultural Communication and Journalistic Outcomes

Learning Objective: Explore career opportunities in agricultural communication and journalism.

ASTE 1710: Introduction to Agricultural Communication
Students enrolled in ASTE 1710 interview an agricultural communications professional and deliver presentations to their peers during class. Students have learned of careers from these individuals:
- Marty Gifford, 4-H Youth Development Extension Educator, University of Wyoming
- Sabrina Hill, Farm News Director at AgNet West Radio
- Andy Nelson, Clear Out West radio show
- Clark israelsen, Agriculture Extension Agent in Cache County
- Kayli Cummings, Communications & Event Manager for Utah and Nevada Dairy Council
- Walt Cooley, Manager Editor at Progressive Publishing
- Denise Stewardson, Director of Utah Agriculture in the Classroom
- Tamra Watson, Communications Specialist for Utah’s Own, a division of Utah Department of Agriculture and Food
- John Moss, Public Relations Director at Wasatch County School District
- Dave Rallison, Commodity Broker and Feed Consultant for Intermountain Farmers’ Association
- Matt Hargreaves, Vice President of Communications & Farm Bureau News Editor, Utah Farm Bureau
- Colby Mower, account executive with Bader Rutter

ASTE 2830: Agribusiness Sales and Marketing
Students enrolled in ASTE 2830 create and implement a sales call plan to sell a service or project to a potential customer. These sales calls are video and audio recorded for the students to watch and self-evaluate to learn how to improve their sales skills. This project allows students to explore the skills needed in agribusiness sales positions. The students have created their sales call plans for these companies:
- My Blue Boy
- Progressive Cattlemen’s Magazine advertising division
- SmartPak
- Purina Availa-4 Mineral Tubs
- 1841 Massey Ferguson Baler for Agri-Service
- Camp Chef’s stryker stove
- John Deere’s hay rake
- Trimble E-Z Guide 250 for Valley Implement
- Snap-On Tools
- Lely Calm Calf Feeder
ASTE 3050: Technical and Professional Communication Principles
Agricultural communication and journalism students enrolled in ASTE 3050 write a cover letter and resume for an internship or job.

ASTE 2250 & ASTE 4250: Occupational Experiences in Agriculture (aka Internship)
The faculty advisor has mentored undergraduates seeking internship credit through the agricultural communications and journalism program and the JCOM Department since 2012.

- Lindsey Snyder, communication intern, Logan Regional Hospital, Logan, Utah
- Cassidy Woolsey, USU Gardens marketing assistant, USU Cooperative Extension Services, Logan, Utah
- Paige Marez, intern production assistant, Utah Public Radio, Logan, Utah
- Bailee Woolstenhulme, intern at Utah’s Own, Utah Department of Agriculture and Food, Salt Lake City, Utah
- Alex Bennett, social media & website intern, Small Farm Program, Utah State University, Logan, Utah
- Leann Fox, public policy intern at National Beef Cattlemen’s Association, Washington, DC
- Jamie Keyes, rangeland media intern, Utah State University Department of Wildland Resources, Logan, Utah
- Lindsey Snyder, Utah Agriculture in the Classroom, Logan, Utah
- Jamie Keyes, Turf and Ornamental Communicators Association, Cleveland, Ohio
- Cassidy Woolsey, Progressive Publishing, Jerome, Idaho
- Lindsey Snyder, agricultural science reporting intern, Utah Public Radio
- Lindsey Snyder, Summit County 4-H Extension, Utah State University
- Dawn Otterby, Utah Farm Bureau, Sandy, Utah
- Leann Fox, ABC 4 News, Salt Lake City, Utah
- Sarah Hatch, Utah State University, Extension Services, Logan, Utah
- Jamie Keyes, Ad Farm, Agricultural Media Summit, Buffalo, New York
- Kennedy Spiers, Utah Farm Bureau, Sandy, Utah
- Rachel Fry, State of Alaska, Division of Agriculture, Palmer, Alaska

Learning Objective: Demonstrate knowledge of skills, trends and principles (sales, design or writing) used in agricultural communication professions.

Each ACAJ course has course learning objectives and chapter or unit learning objectives that address the skills and principles students will achieve by the end of the semester. A pre-test and post-test are administered to students enrolled in ASTE 3050 and ASTE 3090 to measure students’ change in knowledge of the skills and principles used in agricultural communication professions. As shown in Table 1, there is a significant difference between the pre-test and post-test score (t(27) = -5.38, p = 0.000) in ASTE 3050. The students had a mean of 8.07 points out of 12 on the pre-test, as compared to a mean of 9.71 points on the post-test. Similar evidence exists for the ASTE/JCOM 3090 course based on the change in pre-test to post-test score in both spring 2015 and spring 2016 (t(6) = -7.68, p = 0.000 and t(10) = -6.35, p = 0.000). Out of 20 points, the
pre-test means were 7.29 points and 9.55 points respectively, as compared to the post-test means of 12.43 and 16.09.

Table 1
Change in Score by AJAC Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Pretest</th>
<th>Posttest</th>
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<td>N  M</td>
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<td>M</td>
<td>SD</td>
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<tr>
<td>ASTE 3050</td>
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<tr>
<td>Summer 2015</td>
<td>28 8.1</td>
<td>1.609</td>
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<td>1.410</td>
<td>-5.38</td>
<td>27 .00 -2.07</td>
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<tr>
<td>ASTE/JCOM 3090</td>
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<tr>
<td>Spring 2015</td>
<td>7 7.3</td>
<td>1.25</td>
<td>12.4</td>
<td>1.61</td>
<td>-7.68</td>
<td>6 .00 -6.27</td>
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<tr>
<td>Spring 2016</td>
<td>11 9.6</td>
<td>1.86</td>
<td>16.1</td>
<td>2.51</td>
<td>-6.35</td>
<td>10 .00 -4.01</td>
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</tbody>
</table>

Learning Objective: Demonstrate written, verbal and visual communication about food, agriculture or environmental topics.

Five ACAJ courses have included writing, visual and/or oral communication assignments to have students demonstrate their ability to apply concepts taught in class to real-world assignments expected of agricultural communication professionals. A rubric is used to grade each of the assignments. The minimum, maximum, mean scores are provided to the faculty advisor to track how students demonstrate their written, verbal and visual communication about food, agriculture or environmental issues. This section provides a brief description of each course’s relevant assignments and those statistics.

ASTE 1710 Relevant Assignments & Assignment Statistics
- **Blogging** – Students create a blog and write a total of 8 entries about current issues that have an impact on or connection to agriculture and or the natural resources in Utah.
- **Photo Critique** – Students apply what was learned about agricultural photography by taking photos of plants, crops, animals, or landscapes. Students will critique their photos and photo captions during class.
- **Podcast** – Students develop a podcast on a topic that relates to their blog. They interview sources, write a script and record the podcast to be uploaded to their blog.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
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<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td>Fall 2014</td>
<td>7</td>
<td>82.5</td>
<td>100.0</td>
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<td>6.00</td>
<td>10.0</td>
<td>10.0</td>
<td>9.00</td>
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<td>9.4</td>
<td>1.77</td>
<td>0.0</td>
<td>24.5</td>
<td>19.8</td>
<td>8.03</td>
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</table>

ASTE 2830 Relevant Assignments
- **Ready, Set, Sell Project** – Students work in a team of 4 to sell a product or service to a potential customer. The project has multiple assignments to assist the students in learning the sales process. Two of the assignments are the sales call plan and sales call presentation.
- **Sales Call Plan** – The sales call plan includes these items:
- Sales goal and sales call goal
- The opening
- Probing questions
- Features-Advantages-Benefits Statements
- 5 objections with how to handle those objections
- The close
- Next step

**Sales Call Presentation** – Students have 20 minutes to pitch their sales call plan to a potential customer of the product or service they are selling.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
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<td>11.69</td>
<td>16.0</td>
<td>18.0</td>
<td>16.9</td>
<td>0.80</td>
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</table>

ASTE 3050 Relevant Assignments

- **Email & Memo Project** – The goal of this assignment is to apply what students have learned to write an email and memo about any topic or situation for a business, organization, government agency, etc.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
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<tr>
<td>Fall 2014</td>
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<td>42.0</td>
<td>50.0</td>
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<td>Spring 2015</td>
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<td>30</td>
<td>32.0</td>
<td>49.0</td>
<td>43.9</td>
<td>3.76</td>
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</table>

- **Employment Project (Cover Letter & Resume)** – Students select a job or internship for which they would apply for. They must write a cover letter and resume for that job or internship.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
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<td>Spring 2015</td>
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<td>72.0</td>
<td>98.5</td>
<td>90.3</td>
<td>7.46</td>
</tr>
</tbody>
</table>

- **Mock Interview** – Students use their cover letter and resume to prepare for a mock job interview. Students must answer a series of behavioral based questions using the strategy shared by AgCareers.com’s representative.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<td>Summer 2015</td>
<td>30</td>
<td>0.0</td>
<td>50.0</td>
<td>42.3</td>
<td>9.27</td>
</tr>
</tbody>
</table>

- **Technical Description & Technical Instructions** – Students must choose a specific technical object, mechanism or process and write a technical description. Then write instructions that use the object, mechanism or process to do something.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
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<td>58.5</td>
<td>98.5</td>
<td>89.3</td>
<td>8.31</td>
</tr>
</tbody>
</table>
ASTE 3090 Relevant Assignments

- **Photo Composite** – The goal of this assignment is to have students show their ability in selecting photographs that they can use in Photoshop CC to create a composite image. They must create one composite image from a minimum of three separate photographs and one text layer.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<td>Spring 2016</td>
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<td>13.0</td>
<td>19.0</td>
<td>17.2</td>
<td>1.80</td>
</tr>
</tbody>
</table>

- **Identity System** – Students must design a logo in Adobe Photoshop CC then use that logo to design a business card and letterhead in Adobe InDesign CC.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<td>28.5</td>
<td>39.0</td>
<td>34.1</td>
<td>3.31</td>
</tr>
</tbody>
</table>

- **Flier** – Students use Adobe InDesign CC to create an 8.5” x 11” flier that promotes an event, product, or service for a for-profit business or non-profit organization.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
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</tbody>
</table>

- **Brochure** – Using Adobe InDesign, students create a brochure to promote an event or a product or service for an organization/business.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2014</td>
<td>18</td>
<td>64.0</td>
<td>93.0</td>
<td>86.2</td>
<td>7.34</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>10</td>
<td>41.5</td>
<td>48.0</td>
<td>44.4</td>
<td>2.14</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>14</td>
<td>30.0</td>
<td>47.0</td>
<td>41.7</td>
<td>4.96</td>
</tr>
</tbody>
</table>

ASTE 4900 Relevant Assignments

- **Senior Project Proposal** – Students write a 2- to 3-page project proposal that clearly states the purpose of their website, intended audiences, content and design choices. Each student meets with the instructor to discuss the proposal.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2015</td>
<td>2</td>
<td>27.5</td>
<td>29.5</td>
<td>28.5</td>
<td>1.41</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>6</td>
<td>25.0</td>
<td>29.5</td>
<td>28.3</td>
<td>1.75</td>
</tr>
</tbody>
</table>

- **Website** – Students use Adobe Photoshop and Dreamweaver CC programs to design a responsive website that showcases their online portfolio, including an introductory page, examples of work (writing, photography, videos, graphic design), resume and contact information.
<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2015</td>
<td>2</td>
<td>86.0</td>
<td>95.0</td>
<td>90.5</td>
<td>6.36</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>6</td>
<td>72.0</td>
<td>96.0</td>
<td>89.1</td>
<td>8.79</td>
</tr>
</tbody>
</table>

- **Senior Project Poster** – Students design a 36” x 48” poster that tells a story about their senior project work. They must design the poster in Adobe InDesign CC, export the poster as a PDF and print it for display during the ASTE Senior Projects Day.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2016</td>
<td>6</td>
<td>45.0</td>
<td>48.0</td>
<td>46.8</td>
<td>1.29</td>
</tr>
</tbody>
</table>

- **Senior Project Presentation** – Students deliver an 8-to 10-minute presentation before their peers to describe their senior project, discussing the technologies used, features, lessons learned, challenges, and application to their future work plans.

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2016</td>
<td>6</td>
<td>46.0</td>
<td>50.0</td>
<td>47.7</td>
<td>1.97</td>
</tr>
</tbody>
</table>

**Learning Objective: Understanding the meaning of professionalism.**

Students enrolled in ASTE 1710 teach 15-minute macro lessons on etiquette topics presented at our agricultural communication workshops (Ag Media Summit, National ACT Professional Development Conference).

Two surveys in ASTE 2830 and ASTE 3090 measure students’ perceptions of employability skills gained from completing a major course project. Could data from those surveys be used in the assessment? These studies were presented at research conferences and will be published in an academic journal.

**ASTE 2250 & ASTE 4250: Occupational Experiences in Agriculture (aka Internship)**

Internship supervisors evaluate students at the completion of their internship experience to provide feedback to the faculty adviser. The students are evaluated on professional and employability skills that are desired in the agricultural communication and journalism industry.

Table 2 summarizes the employer evaluations since spring 2013.

**Table 2**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat above average</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Well informed</td>
<td>4</td>
<td>50.0</td>
</tr>
<tr>
<td>Extremely well informed</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Effect on Workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better than average</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Promotes cooperation and goodwill</td>
<td>3</td>
<td>37.5</td>
</tr>
</tbody>
</table>
The employer evaluation provides an overall rating of student performance on a 5-point scale ranging from Excellent (5) to Poor (1). The employers have ranked 4 interns at excellent (50%) and 4 interns at very good (50%).

ASTE 2830: Agribusiness Sales and Marketing

See pdf on employability skills
Incorporating Problem-Based Learning to Develop Employability Skills in Agriculture Undergraduates

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Citation:

Hawley, J. L., & Hall, K. (2016, June). Incorporating problem-based learning to develop employability skills in agriculture undergraduates. Poster session presented at the meeting of the Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences, Memphis, TN.
Incorporating Problem-Based Learning to Develop Employability Skills in Agriculture Undergraduates

Introduction and Theoretical Framework

An agribusiness sales and marketing course offered at Utah State University moved away from traditional lecturing to problem-based learning where students were presented a problem with selling certain products (agricultural equipment, seed, feed or feed supplements, food, etc.) in the state. These students worked in teams of four peers on a semester-long project titled “Ready, Set, Sell.” They delivered a 20-minute sales presentation and written sales report for one of these products to a prospective customer. Students gained knowledge about selling through a textbook and class activities, heard it illustrated with guest speakers, shadowed a salesperson in the field, practiced it through their sales presentation, and evaluated the sales presentations of other peers. Several courses in geography, and poultry science have implemented problem-based learning (PBL) to infuse employability skills (collaboration, problem solving, critical thinking, communication, self-management, knowledge of work responsibilities) needed by graduates in their disciplines. A few studies have reported employers’ perceptions of employability skills agriculture college graduates need before entering the workplace, specifically solving problems, communicating effectively (written and oral), working on a team, thinking critically, and possessing interpersonal skills (Alston, Cromartie, Wakefield, & English, 2009; Heimler & Kilduff, 2014; Robinson, 2009; Robinson & Garton, 2008). The purpose of this study was to determine the outcomes of using PBL by agriculture students in an agricultural sales course. This poster presents one objective of the study: discover the employability skills students gained from using PBL to complete the Ready, Set, Sell project.

PBL strategy allows students to direct their learning by solving real-life problems and engaging in course content with the goal of deeply understanding concepts or practices used in a discipline (Barrows & Tamblyn, 1983; McMay, Gradel, & Scott, 2013). PBL helped students connect knowledge to application with the completion of a large class project worked on throughout the entire course (McMay et al., 2013). Students in a geography course perceived improving their higher level thinking skills when PBL was used—analytical thinking, problem solving, and reflection (Spronken-Smith, 2005). Poultry science students, who used PBL to develop a team written report and oral presentation to solve an issue at a broiler company, also reported improved critical thinking, team building, and communication (Chamblee & Morgan, 2009). Students in upper level psychology courses measured their perceptions of the PBL project on a 5-point Likert scale ranging from strongly agree to strongly disagree. Students strongly agreed (46%) or agreed (46%) their ability to find, read, and analyze information improved.

Methodology

This study used a paper survey administered during the last week of class. The population for this study was 36 undergraduate students enrolled in an agricultural sales course during fall 2015 at Utah State University. Based on previous literature, the researcher-developed instrument included eight Likert-scale questions asking students to indicate what employability skills were gained from completing the Ready, Set, Sell project (McMay et al., 2013). Post-hoc Cronbach’s
alpha was .86 for the employability skills construct. Data were analyzed using SPSS statistical software.

Results

Of the respondents, the majority was female ($n = 19,\; 54.3\%$) with an academic ranking from senior ($n = 6,\; 17.1\%$), junior ($n = 16,\; 45.7\%$), sophomore ($n = 11,\; 31.4\%$), and freshman ($n = 2,\; 5.7\%$). Students primarily majored in agricultural education ($n = 12,\; 33.3\%$), agricultural systems technology ($n = 6,\; 16.7\%$), and agricultural communications ($n = 3,\; 8.3\%$). Half of the students ($n = 19,\; 52.8\%$) indicated PBL should be used in this course again, and 16 students (44.4%) indicated they were neutral. As seen in Table 1, 36 students ($M = 4.06,\; SD = 0.67$) agreed The Ready, Set, Sell project helped them improve their interpersonal skills.

Table 1

<table>
<thead>
<tr>
<th>Perception</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>The RSS project helped me develop interpersonal skills.</td>
<td>4.06</td>
<td>0.67</td>
</tr>
<tr>
<td>The RSS project helped my preparation skills.</td>
<td>4.06</td>
<td>0.72</td>
</tr>
<tr>
<td>The RSS project helped me develop presentation skills.</td>
<td>4.06</td>
<td>0.72</td>
</tr>
<tr>
<td>The RSS project allowed me to collaboratively solve sales problems.</td>
<td>4.03</td>
<td>0.74</td>
</tr>
<tr>
<td>The RSS project helped me develop public speaking skills.</td>
<td>4.00</td>
<td>0.63</td>
</tr>
<tr>
<td>The RSS project helped me develop business writing skills.</td>
<td>3.92</td>
<td>0.84</td>
</tr>
<tr>
<td>My ability to analyze information has improved.</td>
<td>3.64</td>
<td>0.76</td>
</tr>
<tr>
<td>My ability to find information has improved.</td>
<td>3.61</td>
<td>0.80</td>
</tr>
</tbody>
</table>

*Note.* The scale was 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

Conclusions

Similar to other projects using the PBL strategy, agriculture students gained employability skills in interpersonal communication, collaborative problem solving and public speaking (Chamblee & Morgan, 2009; Spronken-Smith, 2005). Unlike the psychology students, agriculture students were neutral about gaining some skills such as business writing and research (finding and analyzing information). This research indicates one way to enhance current curriculum to include the necessary skills to better prepare graduates for the workplace.

Recommendations

Several studies reported the increasing importance of college graduates to apply the knowledge and skills gained from their degree to their job. Therefore, agricultural communication faculty who wish to infuse these employability skills in their curriculum could use problem-based learning as a semester-long project or smaller projects completed during lecture time. More instructor time spent on developing resource materials and training students on research skills and finding information might help with improving students’ analytical thinking and research skills. This study appears promising for further investigation and should be replicated with similar agribusiness and sales courses at agriculture colleges for greater generalization and transferability.
References


Data Based Decisions

Strengths

Agricultural Communication & Journalism Internship Program

Students who have accepted a legitimate communications internship can enroll in ASTE 2250 or ASTE 4250 to earn up to 3 credit hours for 150 hours completed. Several assignments help the student document the experience and reflect on what they have learned. Students complete these assignments:

- A five-page paper evaluating the internship experience.
- A hard copy or electronic portfolio that includes examples of the materials produced during the internship, including any writing, design, photography, social media, web design, educational materials or other tangible demonstrations. A detailed narrative must accompany each item in the portfolio.
- A one-page summary of the internship with digital photographs taken during the internship. The summary and photos are published on the college blog and posted to the program’s Facebook page.
- An electronic evaluation of the internship experience from the supervisor.
- An electronic student evaluation of work performance.
- A confidential evaluation of the student’s work experience, so the program has feedback about the employer for the interest of future student.

Agricultural Communication Club

Agricultural Communication Club fosters career and professional development among industry professionals, faculty, and students within the agricultural communications field. The club is an official chapter of the National Agricultural Communicators of Tomorrow (National ACT) and an official university club. Through club membership, students have attended the National Association of Farm Broadcasting Convention, National ACT Professional Development Conference and Ag Media Summit each year since 2014.

Creation of Graphic Design Course

Students receive training in using Adobe Photoshop for editing photos and using Adobe InDesign for designing marketing materials (logos, business cards, letterhead, envelopes, flyers, bookmarks, menus, brochures) that are commonly used in the agricultural communication field.

Teaching Web Design Skills

Students take ASTE 4900 Senior Project as an upper level course in the major. Senior Project brings together the agricultural topics and communication techniques that have been developed throughout the program’s course of study and encourages students to expand their skills by designing an online portfolio using Adobe Dreamweaver’s responsive web design tools. Students exhibit their Senior Project and delivery of a poster and oral presentation about their Senior Project and experience.
Undergraduate Research & Creative Projects
Several undergraduates have completed research projects or creative projects under the supervision of the program advisor. Three of these students have presented research posters or published journal articles related to agricultural communication issues, while other students have designed marketing materials for clients.

Weaknesses and Recommendations

No Publication Production Course
Many agricultural communication and journalism programs offer a capstone course that integrates all of the students’ previous course experiences to produce a publication. Students would sell, design and layout advertisements; communicate with advertisers; search for, write, peer critique and edit feature stories about students, faculty and programs in a college or department; design and create feature story layouts; work with high-resolution graphics and interact with peers to solve problems and take advantage of opportunities. The program advisor would like to implement similar opportunities for seniors.

No Required Public Speaking Course
Industry professionals have participated in studies seeking out the competencies needed by agricultural communication undergraduates. The ability to effectively communicate verbally was ranked fifth in a list of communication skills. The program recommends listing speech courses as directed electives for students in the major.

Outreach Efforts

Brian Warnick, Becki Lawver and Kelsey Hall collaborated together to develop an agricultural communication curriculum available for Utah agriculture teachers.

Students enrolled in ASTE 3090 – Graphic Communications in Agriculture – work with clients (AgrAbility of Utah, Aggie Ice Cream, Common Ground, Utah Agriculture in the Classroom, Agricultural Communication Club) to produce marketing materials to meet their communication needs.

Agricultural Communication and Journalism students serve as room moderators and judges for the Utah FFA Agricultural Communication CDE contest every April. The students use a rubric to evaluate the communication materials developed by high school FFA members during the contest, ranging from graphic design, electronic media and journalistic writing.

In spring 2015, Dawn Otterby, a senior majoring in agricultural communication and journalism, designed a marketing plan for the program. The faculty advisor and academic advisor are implementing this marketing plan (recruitment letter, infographic about the agricultural communication program, list of internships, list of career options, program information card, post cards) to be sent to agricultural education teachers and journalism teachers in Utah high schools.
• **Interaction with Other Programs** (within ASTE and externally)

Agricultural Communication Club members have worked with the Dietetics Program at Utah State University to promote USU Food Day.

Kelsey Hall and Agricultural Communication and Journalism students attend the National Association of Farm Broadcasters to receive professional development training in radio and television broadcasting.