Abstract
A social media platform (ValuePulse) linked California agribusiness undergraduates in a marketing class to students in a marketing course in Ireland. The social media platform was used to create a combined group allowing students in both classes to contribute to discussion board posts on current news articles related to marketing. Instructors from each course alternatively posted articles. A survey tool was used to gauge student perceptions of the experience. Results were compared to a control group of California undergraduates using the same social media platform to discuss articles related to their courses, but without the international contingent. Survey results show an increased level of engagement by the international collaboration group. A greater proportion of students in the international collaboration said they learned from their classmates’ comments on the discussion board (73% to 86%) and said that they found the experience rewarding. These results are consistent with prior studies on the internationalization of higher education classrooms and suggest vast potential associated with the incorporation of technology-aided global classrooms.

Introduction
Globalization has brought down barriers across the world and, according to some, has made the world “flat” (Darling-Hammond, 2010; Friedman, 2005). Technology’s contribution to that globalization is irrefutable. Technology has also shaped higher education and has created similar globalization opportunities (Bird and Nicholson, 1998; Miltenoff, et al., 2011). Not only is technology facilitating education’s move from a system based on delivered wisdom to one of user generated wisdom, but it also has a role in a single classroom’s ability to host and facilitate learning across countries (FitzGerald, 2012; Meyer, 2012). The global and interdependent nature of today’s world has created the opportunity for education to mirror that interdependency and, at the same time, has created the demand for graduates of universities to be prepared to operate in a global world (Bourn and Shiel, 2009; Miller, 2002). Educators must work to provide a learning environment that meets those needs.

The internationalization of higher education can come through a variety of forms, from attracting a diverse student population to distance learning where students take courses from overseas schools (Coryell, et al., 2012; Lasonen, 2010). Largely defined “as the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education,” there are other opportunities to bring the world into even traditional face-to-face courses (Knight, 2003, p. 5). High school students in Japan collaborated through teleconference with a Florida class on mutual projects and assignments in 2002 with significant benefits relating to contextual-based learning and student motivation (Loveland et al., 2004). However, difficulties in communication and the nature of distance learning technologies themselves arose (Loveland et al., 2004). New Zealand health science students used email to contact physiotherapists in developing countries concerning a fictional scenario they had been given, allowing them to gain a better appreciation of differences in their field across countries and cultures (Williams and Blaney, 2000). Intercultural dialog in higher education has been shown to contribute to conflict management and resolution, even in high conflict regions (Bergan and Van’t Land, 2010). The outcomes related to an internationalized curriculum are vast (including the ability to think globally, awareness of cultural perspectives, and a value of diversity) and occur even when internationalization is done through.
technology (Fallows and Steven, 2000; Leask, 2004; Patterson et al., 2011).

Constructivist pedagogies involve actively engaging students in learning as opposed to students passively receiving information from an instructor. Within the constructivist theory, social constructivist theorists believe that the social aspect of learning is essential (Richardson, 1997). Similarly, Schleicher (2012) reiterates in his TED talk that education based on delivered wisdom to be one of the past, while education based on user-generated wisdom is the approach that will prepare students for the jobs of the future.

Discussion boards facilitate peer learning and allow students to be influenced by their peers (Fung, 2004). The uses for discussion boards as a tool for engaging students and allowing peer-to-peer engagement and learning are measurable (Hendrickson, 2009). Discussion boards are believed to facilitate collaborative and social learning, but have also been linked to improved communication skills and higher levels of critical thinking (Wilson and Fairchild, 2011). In addition, Pena-Shaff et al. (2005) found a positive relationship between online participation in discussion boards and student satisfaction in the course.

Student engagement is positively linked to desirable learning outcomes, including both critical thinking and grades (Carini et al., 2006). One of the ways to get students engaged is by making the material relevant for them. Linking course concepts to current events and the news is an approach to making the material relevant, thus leading to student engagement and ultimately, student learning (Kember et al., 2008). Prior research has shown the powerful teaching impacts associated with using current events to teach course concepts (Grise-Owens et al., 2010).

Recognizing the benefits of providing relevant and timely material to students and also the potential learning benefits associated with international collaborations, the objective of this paper is to showcase an international virtual collaboration between two university classes and isolate impacts on student engagement. If technology and discussion board platforms make it feasible to create an international learning environment, in what ways do students benefit from that experience? Are there drawbacks to the experience? And, are students more interested and engaged with the course material as a result of the international collaboration?

**Methods**

An instructor from the National University of Ireland Galway (NUIG) and one from California Polytechnic State University (CPSU) at San Luis Obispo both agreed to use a fall 2012 face-to-face marketing course for an international classroom collaboration. The NUIG contingent included 36 students that were enrolled in an e-commerce and marketing course while the CPSU contingent included 45 students enrolled in an upper division agribusiness-marketing course. The instructors included participation in a mutual online discussion as a graded portion of the course (as suggested by Lesak, 2004), assigning points for meaningful comments on the discussion board. At the end of the respective terms, students completed a survey of their engagement, interest in the online discussion board, and perspective of the international collaboration.

The instructors employed the social media platform ValuePulse as the basis for the international discussion forum. ValuePulse is a free social content discussion forum that pulls curated RSS feeds and allows users to discuss current news. Instructors agreed to alternate weeks of posting articles to their combined group of students, with students from both classes commenting and discussing the articles. Posted articles were current news related to marketing from a wide array of news sources and were meant to supplement textbook material and established course content.

Survey results from the Irish and American students completing the online discussion collaboration would be compared to survey results from students taking other marketing courses at Cal Poly during the same term, also with an online discussion, but with no international collaboration. The control group courses included the online discussion board as a graded portion of their course, with instructors posting relevant articles for the class to discuss. The control class’ discussion was amongst the class members only, rather than with an outside course’s involvement. The control group courses, like the international collaboration, were all upper division business and marketing courses taught during the fall of 2012. Discussion topics in both the international collaboration and the control groups included timely news articles that were tied back to course topics, however it could be argued that students in the international collaboration were exposed to a more diverse set of topics as they were being exposed to Irish and US centered news articles.

A survey instrument was designed with 22 questions relating to the student’s demographic information and prior tools used for sharing class documents and news articles relating to class content. The survey also included questions on perceptions of the social media platform (ValuePulse), the collaborative learning environment, and the student’s engagement with the course material. Students from the international group and the control group were all sent links to the survey through SurveyMonkey and encouraged to respond.
Results and Discussion

As planned, students from both the NUIG and CPSU courses joined a single group on ValuePulse and participated in weekly news article discussions relating to core marketing topics. Students from CPSU were designed with a “Poly” before their name, allowing all students in the collaborative discussion to identify their overseas classmates. The faculty alternated posting articles with question prompts for students and students were instructed to respond to the news articles with their insights and opinions based on the prompts provided by the instructors. The discussions on each article included students from both countries. Students responded to each other’s comments. Irish students made specific comments to the posts of American students and American students made specific references to the posts of Irish students. It was truly a cross-cultural dialog about current marketing issues.

Survey results were obtained from 30 students from NUIG and 39 CPSU students, 83% and 86% response rates, respectively. The control group included 123 survey responses. Initial comparisons between the Irish students and the students from the US courses (both the combined course students and the control group students) revealed that 60% of the Irish course was male, and 53% of US student respondents were male. The Irish student respondents had less variability in the number of years that they had been in school and were, on average, further along in their education relative to the US students (average of 3.2 years for US students, with an average of 4.5 years for the Irish students). Relative to existing usage of technology for education purposes, the Irish students had significantly less experience using Google Docs to share course content (30% vs. 66% for the US students), but significantly more experience using Twitter for class related communication (33% of the Irish contingent compared to just 2% of the US students) and more experience using Wikis for class communications (27% of the Irish contingent relative to just 7% of the US students). Prior use of Facebook for class content was comparable at 56% of the Irish students and 63% of the US students. Some distinctions were apparent; however, this demographic information suggests that although the students may be separated geographically, they are reasonably comparable as upper division marketing and business students in slightly male dominated classes with a reasonable amount of prior experience using social media and article sharing related to their coursework.

Strong learning implications as a result of the ValuePulse discussions were apparent in the control group survey responses. Results from the control group suggest that learning, engagement, written communication, and critical thinking skills all improved as a result of using the social media news discussion. In addition, students in the control group reported learning from each other (73% agreed or strongly agreed with a statement related to learning from each other). These results are consistent with expectations based on Carini et al. (2006) and Kember et al. (2008) that student engagement leads to critical thinking skills and that relevance is a driver of student motivation. Similarly, the international collaboration class reported increased engagement, critical thinking, knowledge about the student’s field of study, and written communication skills. Table 1 depicts complete survey results from the control group and the international collaboration class.

Comparing the results of the international collaboration group to the control classes reveals a stronger crowdsourcing effect in the international collaboration class. Seventy-three percent of students in the control group report learning from classmates, while 86% of students in the international collaborative class reported learning from their classmates through the online discussion, a statistically significant difference at the .05 level. The addition of a multi-cultural component appears to add engagement and interest in reading and discussing information relevant to students’ coursework. In addition to the positive learning outcomes associated with the use of the discussion board, over 90% of students in both the control group and international collaboration class agreed or strongly agreed that they liked being able to share their opinions. Not only are there learning outcomes associated with the engagement, but students are also enjoying the process.

Practical Suggestions and Insights

Survey results indicate potential for incorporating an online current events discussion board as a means to enhance a student’s engagement, communication skills, and critical thinking in agribusiness courses, and support an enhanced collaborative peer-learning environment when the discussion board is combined with an international contingent. For other instructors interested in incorporating an international collaboration into course discussion boards, the authors recommend collaborating with courses covering similar content. While the courses do not have to be identical, in fact, slightly different course topics may provide some added twists to the perspectives being showcased, the base of the course material should be comparable. In addition, the discussion must be incorporated as a graded activity. Each instructor can determine the weights and how the discussion fits into the overall course grade, however, to create an incentive for students to be engaged on the international discussion board, there needs to be some points attached to the activity. The authors also
recommend using current news and events as the foundation for eliciting engagement from students and both faculty should be involved and responsible for finding the content to share. The engagement of both faculty will help model behavior and lead to an even richer environment of multiple perspectives. And finally, identifying the students by country, especially in larger courses, will help further showcase the diversity in perspectives or, perhaps, showcase some surprising similarities.

Summary

Literature from across the field of higher education supports the educational benefits associated with active, social, and internationalization of teaching pedagogies. Through an online discussion tool with a group of university students in Ireland and the United States, student engagement increased, students learned from each other, written communication improved and critical thinking skills improved. Relative to a control group of students, the international collaboration group had an intensified social learning experience, learning from their overseas classmates. Technology made the internationalization of these two marketing courses virtually seamless. What once may have been impossible is now readily available to instructors of higher education. There are challenges related to the timing of the courses, finding willing international collaborators and language barriers, but this case provides one example of a global classroom created through social media that led to many of the internationalization learning outcomes promised in the teaching literature.

Agriculture is global, and the need for students studying agriculture to have an international perspective may be even more relevant than for other disciplines. Prior literature has advocated the need for creating a learning environment that engages post-secondary agricultural students with their subject matter through active involvement. Not only did this relatively straightforward discussion board format encourage students to be actively involved and think about the implications of current events on marketing agricultural and food products, but by incorporating the international contingent students became even more engaged in the process (Estepp and Roberts, 2011). The international exposure benefited the students in the short term with regard to their engagement in the course, but the experience will likely hold far-reaching implications as they begin their careers with an additional international perspective. The future will undoubtedly hold many additional examples as others employ technology to create a rich international learning environment for our agricultural students.

| Table 1. Survey Results from the International Collaboration Class vs. the Control Class |
|-------------------------------------------------|---------------------------------|---------------------|
| Through ValuePulse…                              | % of respondents that agree or strongly agree | P-value* |
|                                                  | Combined | US Only |                      |
| My written communication skills have improved   | 60.9%   | 54.5%   | .049                |
| I learned from classmate’s comments             | 86%     | 73%     |                     |
| I feel like I know more about the general news   | 76.8%   | 82.1%   |                     |
| I know more about my coursework and field of study| 84.1%   | 80.5%   |                     |
| My critical thinking skills have improved        | 75.4%   | 69.1%   |                     |
| I feel more engaged and interested in course topics | 89.9%   | 88.6%   |                     |
| I like being able to share my opinions          | 92.8%   | 90.2%   |                     |

* P-value was obtained from an independent samples t-test and only reported for significant differences at the .05 level.

Literature Cited


Kember, Ho, and Hong 2008. The importance of establishing relevance in motivating student learning. Active Learning in Higher Education 9(3): 249-263


