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Koray Özpolat University of Rhode Island, koray@uri.edu

Yuwen Chen

See next page for additional authors

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Authors

Koray Özpolat, Yuwen Chen, Douglas N. Hales, Degan Yu, and Mehmet G. Yalcin

Using Contests to Provide Business Students Project-Based Learning in Humanitarian Logistics: PSAid Example

Koray Ozploat* (Corresponding Author) Yuwen Chen* Douglas N. Hales* Mehmet G. Yalcin* Degan Yu*

*The University of Rhode Island College of Business Administration koray@uri.edu

ABSTRACT

Business students appreciate working on classroom projects that are pleasurable and also prepare them for future careers. Promoting competition among project teams is often used as a method to motivate students. We have developed the "Humanitarian Logistics Project (HLP)" to teach undergraduate students the logistical implications of unsolicited material donations in disaster relief. To encourage competition, students are organized into teams of three and tasked with designing humanitarian public service announcements (PSAs) that improve the understanding of humanitarian issues in the general public. These announcements are then submitted to the national PSAid (Public Service Announcements for International Disasters) contest for American college students. This exercise is rigorous because it requires students to collect logistical data and use it to communicate the *smart compassion* idea with to the public in a creative fashion. At the end of the semester, not only do they learn some topics in humanitarian logistics by competing with other college students nation-wide but also make a socially responsible contribution to the public. Analysis of the test results shows that students' learning outcomes and comprehension levels of the project topic "humanitarian logistics" is significantly above other operations and supply chain topics covered throughout the semester in class and student satisfaction with the HLP is quite high.

INTRODUCTION

"Competition and competitive rhetoric can be healthy. It's what drove the United States to pursue the Soviet Union into space, creating countless innovations along the way. Indeed, President Obama has encouraged Americans to seize this "Sputnik moment" in education, reminding us that billions of people around the world "are working every day, to out educate and out-compete us." Wendy Kopp, CEO and co-founder of Teach For All and the founder of Teach For America, WSJ Opinion 12/4/2013

University students compete with each other to earn some expected benefits, such as top grades for the dean's list, recognition by professors etc. Competition occurs not only within a college but also across campuses in job placement, scholarships, and athletics. To encourage competition in the classroom, contests are used to motivate students to higher levels of performance (Burguillo, 2010). One classroom technique is to group students into teams to promote cooperation, and then encourage the teams to compete to promote performance. This method has been shown to increase effectiveness in a number of studies (e.g. Beersma et al., 2003; Threeton & Pellock, 2010). Beyond the classroom, student competition can be elevated to college, national, and international levels that increase the perceived benefits, such as potential recognition for winners. For example, studying the outcomes of student contests run by the FFA (Future Farmers of America), Osborne and Witt (1985, pp.8) suggest,

"...contests provide application of principles and practices learned in other settings, development of personal and technical skills, an increase in student motivation, an opportunity to develop social and communication skills, and a positive influence on the development of one's self-confidence."

Similarly, a psychological study found that beyond the basic benefits of team competition, feedback on performance improves the benefits to individual participants, both for interpersonal and intrapersonal attributes (Tauer & Harackiewicz, 2004). This project-based learning approach is commonly used in business schools, but directly connecting these projects to real-world applications, instead of contextual abstractions, has proven challenging for many teachers. Preparation is time-consuming and often requires collaboration with industry professionals. Where industry is involved, managers often want a report or final presentation of the results, requiring an additional level of coordination.

To demonstrate a successful exercise, we describe an experience applying humanitarian logistics to a group of undergraduate business students at a mid-sized state university in the northeast U.S. To reduce bias, the humanitarian logistics project (HLP) is optional and offered to all business majors through the introductory operations and supply chain management course (BUS 355). In this upper level course, students working in teams of three are asked to design a public service announcement (PSA) for submission to the national PSAid (Public Service Announcements for International Disasters) contest organized annually by the U.S. Agency for International Development (USAID) Center for International Disaster Information (CIDI). The goal is to develop visual announcements (8"x10" print or 30 seconds video) that encourage

monetary donations, instead of material donations, as relief aid to international disasters. Defining the project more formally, HLP consists of forming a team, conducting research in logistics of disaster relief and implications of unsolicited material donations in the humanitarian relief process, preparing a summary report, drafting a PSA, presenting the PSA as a team in the classroom, evaluating and incorporating the feedback, submitting the final product to the PSAid contest and concluding with peer evaluation of team members. This project provides students an experiential learning opportunity in humanitarian logistics that is consistent with the university's strategy to encourage project-based learning and social responsibility. As evidence of improved student engagement and course performance, measured through course learning outcomes, student test scores in the project topic of humanitarian logistics were tracked separately from the scores of non-project topics covered in BUS 355. Students scored significantly higher in the project-related questions than other questions, suggesting they were successfully engaged and motivated to perform well on the project. As expected, this resulted in better understanding and application of humanitarian logistics principles. Moreover, a project assessment survey and analysis of peer evaluations showed that student satisfaction in this project has been very high. As external evidence of effectiveness, over the past two years, BUS 355 students have won a variety of awards and national recognition from the PSAid contest - competing with teams across majors (e.g., communications, art & design, business) and universities.

In the remainder of this article, we will provide a brief synthesis of the relevant literature, introduce the HLP, provide empirical evidence regarding the project's impact on learning outcomes and conclude the paper.

EXERCISE GOALS AND THE PSAID CONTEST

Currently, we offer two team projects to our students in BUS 355: (i) an Excel based forecasting project, and (ii) the HLP, which is the topic of this paper. Early in the semester, students pick one of these two projects. Being offered two different types of classroom projects, students are able to select a project that better matches their skills and preferences. The HLP, mostly selected by business students majoring in non-quantitative areas (e.g, marketing, entrepreneurial management and general business), allows students to exercise more creativity and freedom in their semester project. Therefore, we introduced the HLP with three specific learning objectives: (i) teach selected humanitarian logistics and supply chains topics to junior business students in an experiential project environment, (ii) develop students' team-work and presentation skills, and (iii) facilitate student participation in a social responsibility project to inform the public about effective forms of donation. We use the annual PSAid contest as a medium for students to showcase their project in the national arena and a method for judging the national student competition. We view this project not only as a teaching exercise but also as a contribution to the federal efforts to educate the public in smart compassion (i.e., donating cash to reputable relief agencies rather than unsolicited goods).

The topic of humanitarian aid is appropriate due to the increasing trend in the magnitude and frequency of disasters worldwide (Braman et al., 2010). The American public has been very generous and regularly supports relief efforts with both material and monetary donations. Despite good intentions, unsolicited material donations have proven to be very ineffective in international disaster aid, where the cost of shipping and handling to the disaster area can exceed the value of the original donation (Holguín-Veras et al., 2014). To educate the public and encourage monetary donations the U.S. federal government created the USAID CIDI in 1988, which runs the annual PSAid contest for college students. USAID CIDI describes the contest as follows:

"PSAid is an annual contest, open to the public, which attracts creative Public Service Announcements (PSAs) that encourage Americans to practice smart compassion when helping people affected by disasters. Disaster situations evolve quickly and people's urgent needs may change daily. PSAid contestants help educate prospective donors by creating PSAs that illustrate why monetary donations have substantially greater positive impacts on international disaster aid than do material donations." (http://www.psaid.org/about-psaid/)

College teams join the contest by designing either a single-page print or a 30-second video PSA persuading the public to make monetary donations. Whether they win or lose, all entries are evergreen, meaning that the accepted submissions do not contain any dated material and are permanently displayed for public use on the contest website for relief agencies to educate their donors. The entries are judged by a panel of distinguished experts from the fields of philanthropy, disaster relief, and communications. The top three entries for both categories are recognized annually, with the winners aired during NFL games and popular prime-time shows.

THEORETICAL FOUNDATIONS

The HLP incorporates three tracks of educational and learning research: competition and learning, project-based learning, and social responsibility. To support competition and learning, Dagiene (2010), Gregson and Little (1999) and Burguillo (2010) show that competitive contests at many levels motivate student's interest and performance in a variety of university courses. To support the use of project teams, Slavin (1977) argues that a mix of cooperative and competitive reward structures is the most effective for maximizing both the academic outcome and the collaboration among students. The HLP team structure in BUS 355 encouraged the cooperative efforts and the PSAid contest encouraged the competitive efforts. Gregson and Little (1999) demonstrated this by replacing conventional circuit design lab sessions, where individual

students practice circuit design in isolation of other student efforts, with a contest and award for the best student designs. He observed that the contest actually increases student motivation and learning outcomes, and students prefer the contest over the conventional lab. Regarding the particular learning outcomes of using contests, Threeton and Pellock (2010) find that participation in the SkillsUSA Occupational Health and Safety national competition fulfills three out of four competency categories in reading standards. In state FFA contests, Johnson (1993) finds that the learning results are positively related to the achievement in the student contest. Our BUS 355 results for choosing HLP concur with previous research supporting student competitive motivations.

Our use of project-based learning to improve student interest and performance comes from the literature supporting teachable moments, i.e. using deviations from "...specifications for a desired end product (build a rocket, design a website, etc.)" and encountering problems during the learning process as a basis of generating questions in student minds (Savery, 2006). For example, to teach business students all aspects of the business world, Antil and Kydd (2008) utilized the "project oriented immersion learning" pedagogy to focus class efforts. Giambatista and Hoover (2009) empirically study the efficacy of this pedagogical approach in MBA courses and find that (i) behavioral immersion pedagogy is very effective, particularly for student learning of business skills such as executive skills; and (ii) learning intensity contributes to students' acquisition of business skills. In the HLP, we present a clear goal (PSAid submission) that generates teachable moments (in humanitarian logistics) as students encounter problems developing the advertisement, and they also learn a new technology (e.g., Camtasia video editing software).

While the project-based contest format provides an active learning environment to students, another dimension of the HLP - engaging in social responsibility exercises such as raising public awareness in smart compassion, can improve student engagement and influence their values. Applying Malcolm Baldrige National Quality Award (MBNQA) to education practice, Belohlav et al. (2004) conclude that this teaching approach has led to a higher level of student engagement in the learning process. Sroufe and Ramos (2011) offer a model for incorporating real consulting projects on sustainability in an MBA program. They assert that the model helps students in transferring from other core business courses to real-world problems, enhancing ability to integrate sustainability concepts into business decisions, as well as improving other skills such as research and quantitative/qualitative analysis. Pascarella et al. (1988) use a causal model to empirically study college's influence on students' humanitarian or civic involvement values. They find that students' social activity experience during college has significant and positive influence on their development of humanitarian and civic involvement. In the HLP, students design PSAs not only to join the contest but also to help inform the public in making effective donation decisions. Overall, the literature provides evidence that student contests, combining project-based learning with social responsibility topics, can be successfully employed in the classroom to enhance learning outcomes.

PROJECT OVERVIEW

On the first day of class, BUS 355 students are briefly introduced to both team projects and given one week to communicate their project choice, find teammates, and clarify the project expectations with the professor. For HLP, relevant project documents such as an introductory document about the PSAid contest, guidelines for appropriate international disaster donations, and PSA entries from previous semesters are uploaded to the course management system (Sakai) to aid students in decision making. Students with no team member preference are matched with other students opting for the same project. The project component is due in the final week of the semester and carries 25% of the final course grade. To ensure balanced progress throughout the semester, team progress is monitored in four milestones once the project choice is made (see Table 1).

Insert Table 1 Here

The first milestone deliverable is a five-page report summarizing the logistics of disaster relief and a comparison of monetary vs. material donations. We expect HLP teams to conduct preliminary research and familiarize themselves with the logistics of disaster relief as well as the implications of different donation types in the humanitarian operations and supply chains. The grading rubric is provided in Appendix 1.

Following the feedback provided by the professor on the reports, HLP teams start drafting a PSA, which is the second milestone deliverable due in the seventh week of the semester. In response to student requests, an expert instructor is invited to class in order to introduce the Camtasia video-editing software to the HLP students between the first and second milestones. The draft version of the PSAs is evaluated by the professor; and students have ample time to update their entries before formally submitting to the contest at the end of the semester. The most common project issues at this stage are lack of logistics wisdom, absence of the international disaster context in the PSAs, and copyright issues (i.e., copying images from the web). Specifically, pure graphics and art are not sufficient in this project since disseminating humanitarian logistics wisdom in the PSAs is required in alignment with the content of BUS 355.

Students need to show the inefficiencies created by material donations to international disasters (such as handling, storage, shipment, customs costs) and preferably collect/use some data for the purpose of fulfilling the logistics wisdom and informing the public about smart compassion. PSAs need to clarify the context of international disasters which is required by the PSAid contest (http://www.psaid.org/enter-the-contest/rules-and-guidelines/). At this stage it is also common for student teams to submit their work with some plagiarism – through images directly copied and pasted from the web without reference. The copyright issues are brought to their attention at this second milestone.

The third milestone deliverable is due in the tenth week of the semester and entails a classroom presentation of the report in addition to the draft version of the PSA. The expected benefits are twofold such that students: (i) develop their presentation skills, and (ii) receive feedback on their draft version of the PSA before formal submission to the contest. Feedback is provided by fellow BUS 355 students, guest professors and former BUS 355 students who participated in the contest in previous semesters. After the third milestone, teams have three weeks to update their PSAs and make improvements before the formal submission to the contest. The grading rubric is provided in Appendix 2.

Insert Figure 1 Here

The fourth milestone, due in the last week of the semester, is the delivery of their final PSA and peer evaluation forms to the professor, as well as the formal submission to the contest. Peer evaluations carry 20% weight towards the project score which allows teams to reward cooperative team members or penalize free riders. Teams should fix technical issues and successfully upload their PSAs on the PSAid contest website at this stage. Successful

submissions are displayed on the contest website that is used by the professor for verification. An award-winning (2nd place in the print category) submission from our students in 2012 is shown in Figure 1. This winning PSA shows that while monetary donations reach the beneficiaries without much loss, value of a material donation erodes at each stage of the humanitarian supply chain by warehousing, transportation costs, etc., allowing only a small portion of the initial donation value to reach the beneficiaries.

STUDENT MOTIVATION

The HLP has become a prevalent choice among BUS 355 students. Over the past four semesters, approximately two-thirds of the co-author's BUS 355 students have selected this project over the alternative project. Having surveyed students who have participated in the HLP, we observe that three main reasons motivating students to prefer this project are: exercising creativity, engaging in a contest, and practicing social responsibility, as detailed in Table 2. Willingness to engage in a project that allows use of creativity and freedom was a factor in 69.8% of the students' decisions. Competing in the national arena with other college students (37.2%) and willingness to engage in a social responsibility project to help the American public make smarter donation decisions (34.9%) are two other major factors. Additionally, two other factors, pressure from team members (27.9%) and willingness to utilize one's own art and graphics skills (9.3%), also motivated students' project choice. A student responded as follows to an open-ended question in the survey:

"This project allows you to be more creative, and you can have fun with, rather it being strictly numbers and computations. It has to do with a very real life situation and you get to compete nationally. I think that if any of us in class wins something, it will be awesome"

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Insert Table 2 Here

Based upon regular interaction with HLP students, anecdotal evidence shows that students are quite excited by the prospect of winning in the contest. The possibility of having their PSAs aired on NFL games and popular prime-time shows provides an extra motivation to our students. Students from many colleges across the U.S. join the PSAid contest, individually or in teams, and compete with one another to be winners (http://www.psaid.org/portfolio-gallery/2013-submissions/). It is our observation that BUS 355 students are very enthusiastic about the national competition and they are also proud of the winning tradition of previous students.

LEARNING RESULTS

We measured the outcome of the HLP by: analyzing test scores and peer evaluation scores, and surveying students for satisfaction with the project. In the fall 2013 semester, we included a project question in the midterm exam (out of a total of eight questions) which carried 15% weight towards the midterm score. Students in the alternative forecasting project were asked to answer the forecasting related question and HLP students answered a question about humanitarian logistics. Two BUS 355 sections and two exam groups generated four subsets. Based on a set of 53 HLP student scores, the results reported in Table 3 show that the HLP students scored an average of 71.8% in the non-project questions while scoring 85.3% in the project question. The difference is statistically significant (p<0.001) indicating that the learning outcome of the humanitarian logistics topic was better than other topics probed by the remaining seven questions (e.g., capacity management, forecasting, inventory control) for the same students. It is important to note that humanitarian logistics was not in a formal class lecture but

required students to learn the topic on their own by working on a team project, unlike other course topics. Comparing the average midterm scores across the two projects, students who worked on the alternative forecasting project scored 73.5% and HLP students scored 75.0%. The difference of the means is not statistically significant (p=0.61) ruling out the possibility of self-selection bias into projects. Hence, we provide evidence that the HLP resulted in successful learning outcomes in the project topic of humanitarian logistics.

Insert Table 3 Here

Our second analysis is to investigate the peer evaluation scores of students. Students are required to evaluate every team member including him/herself in four dimensions: team meeting attendance, being prepared for the meetings, being cooperative and contributing to the team's efforts. At the end of the semester, peer evaluations are turned in to the professor. Given its 20% weight in the project score, peer evaluations have been taken very seriously by students. Students completed the evaluation by circling one of the five Likert scale responses (see Appendix 3). Coding the responses from 1 (Never) to 5 (Always), we averaged all responses from all HLP students and observed that the average peer evaluation score is 4.79 out of 5.00. This score points to almost perfectly functioning HLP teams.

Finally, in our survey of past students we asked questions about their satisfaction with the HLP. Responses indicate their level of agreement with the two statements given in Table 4 - on a 5 point Likert scale (Strongly Disagree to Strongly Agree). The results reveal that all students either agree or strongly agree that they have a better understanding of the humanitarian logistics

and disaster relief concepts after doing this project. Ninety-three percent of students also responded that they would recommend this HLP project to future BUS 355 students.

Insert Table 4 Here

Lastly, the HLP has built-in project management features that are suggested in the title of this study. The HLP promotes and requires teamwork which is essential for the project's success. The team members autonomously schedule and coordinate the workload towards achieving completion on the specified target deliverable dates. While the faculty monitors and assists teams as needed, built-in peer evaluation process/deliverable serves as an enabler for efficient and effective project execution. Ultimately, the project management skills of the teams are measured based on milestone deliverables.

CONCLUSIONS

The HLP, offered to our students as part of the introductory operations and supply chain management class (BUS 355), has been received very positively by students and has also resulted in better learning outcomes in the project topic. We suggest to business professors that contests can successfully be integrated into the course curriculum through semester-long team projects. In Appendix 4, we provide a list of national contests in the U.S. in various business fields. Although the PSAid project deliberated in this paper cannot be directly imported to any course without changes, we believe that our paper provides two major contributions to education. First, other professors who are interested to adapt national competition in the course project can use our design and instruction as a template. Second, our findings support positive benefits of using contests and social responsibility topics that enrich project-based team learning, and

further advances student satisfaction and learning outcomes. However, incorporating team project competition in class is not an easy task. The design and the project instruction need careful preparation. Challenges from technological issues, sponsorship, business partners, the competency of the agency hosting the contest, or traveling glitches are unexpected but foreseeable. These challenges add extra complexity beyond traditional classroom and textbook in course management. We recommend that instructors first research on potential contests that they are interested and see the viability and demands of adapting them into the course. There is no prescribed formula for project selection that applies to all courses and teachers. Each instructor should evaluate his/her time, expertise and personal preference and choose a right project contest that fits the course.

Additional benefits to the students and the university exist if the project generates winners in these national contests. While it is true that only a few teams are recognized (e.g., six winning teams in the PSAid contest) amongst many contestants, success at the national level is a credible source of pride to students and recognition to the university and the course professors. For instance, our highly motivated students were nationally recognized by receiving the second place in the print category and third place in the video category of the PSAid contest in 2012. This success generated considerable amount of media exposure for the students. Articles appeared in the state and university media. We have also observed that participating students are proud to list the HLP in their resumes and often receive positive comments during job interviews. For example, one BUS 355 professor, a reference to a student, received a phone call from a large chemical company in the northeast regarding the student's job interview. The student's participation and success in the PSAid contest was a major talking point during the conversation. This conversation, coupled with the subsequent employment of the student by the

chemical company, suggests the positive interpretation of the HLP by some employers. The students' success in a national contest has brought recognition to the professors as well. One of the coauthors of this paper received the Dean's Teaching Award, partly for this innovative teaching idea. The HLP also fulfilled two tenets of our university's 2010-2015 academic plan: experiential learning and social responsibility; hence, it was highlighted on the school website by the university administration. Therefore, we are pleased that the PSAs designed by our students contribute to the education of donors by the U.S. humanitarian relief community. We believe this contest-based class project demonstrates great value in student's education and its contribution for a better society.

RECOMMENDATIONS

The PSAid contest submission deadline is April 15th which is good for fall semester projects. However, professors adopting this project in the spring semester could adjust the project schedule slightly to account for the early submission deadline. The 13 week project schedule could be condensed to 10-11 weeks for courses taught in the spring semester or in the quarterly (non-semester) schedule.

We should also note that classroom size and the number of teams assigned to the HLP project could be important factors in offering this project. The class size of BUS 355s has been between 30 and 40 students. As this project was selected by roughly 70% of students, we ended up between 7-9 teams. It is our observation that after 6-7 teams present in class, some foundational topics (e.g., logistics of disaster relief, why is monetary donation smarter?) are repeated a lot which results in less student attention. Hence, we recommend that a maximum of 7 teams are assigned to the HLP project in a classroom of (preferably) fewer than 50 students.

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APPENDIX 1: GRADING RUBRIC FOR THE TEAM REPORT

Content (80 points)

- What is humanitarian logistics? Introduce the logistics of disaster relief (15 points)
- Challenges in humanitarian logistics (getting aid to the needy populations after a disaster) (15 points)
- Compare humanitarian logistics with business/commercial logistics (15 points)
- Why is cash a smarter donation method to international disasters than material (in-kind) donations? (35 points)

Structure/Flow (20 points)

- Having introduction and conclusion paragraphs (5 points)
- 5 page report (excluding title and references) (5 points)
- Title and references pages (5 points)
- Clean, well-printed, stapled (or clipped) report (5 points)

APPENDIX 2: GRADING RUBRIC FOR TEAM PRESENTATIONS

TEAM LEVEL GRADES	Poor (1)	Average (2)	Good (3)	Very good (4)	Excellent (5)		
Layout							
Appropriate use of headings-							
Not too crowded slides							
Logical flow of slides							
Includes cover slide with title, names							
All team members introduced							
	Content						
Use of visuals - images, videos							
Introduction - motivating							
Conclusion - convincing							
	Delive	ery					
Engage the classroom							
Handle questions well	Iandle questions well						
Completed on time							
	Othe	er					
Presentation file uploaded to the classroom desktop in advance	NO YES						
Slides emailed before deadline	NO YES						

Team level total: / 65

1- Student Name:							
Check if absent()							
INDIVIDUAL CRADES Poor Average Good Very good							
INDIVIDUAL GRADES	(1)	(2)	(3)	(4)	(5)		
Transition							
To the next team member							
Delivery							
Hand notes used		NO		YE	S		

Well prepared					
Confident posture					
Slide well designed					
Procedures					
Followed the dress code					
Peer evaluation submitted in print right	NO YES				
before presentation					
Individual total:	/ 35				
Carry over from team level total	/ 65				
Student grade	/ 100				

Depending on the team size, please copy/paste the Individual Grades table for additional students.

APPENDIX 3: PEER EVALUATIONS

HLP – Team Member Performance Evaluation

Section:..... Team No:.....

The "Team Member Name" below refers to the team member BEING EVALUATED. For each question, *CIRCLE ONE* response.

Team member's na	ame			
1. Team meeting a	ttendance			
Always	Nearly always	Sometimes	Nearly never	Never
2. Was prepared fo	or team meetings (read	project, understood	assignment)	
Always	Nearly always	Sometimes	Nearly never	Never
3. Was cooperative	e and willing to adjust	own schedule to acco	ommodate team meeting	8
Always	Nearly always	Sometimes	Nearly never	Never
4. Contributed to the	he team's effort in pro-	ducing the report.		
Always	Nearly always	Sometimes	Nearly never	Never

APPENDIX 4: A LIST OF STUDENT CONTESTS IN BUSINESS FIELDS

Accounting

- AICPA Accounting Competition: <u>https://www.thiswaytocpa.com/accounting-competition/overview/</u>
- Deloitte FanTaxtic Case Study Competition: <u>https://mycareer.deloitte.com/us/en/students/competitionsconferences/tax-case-study-competition</u>
- PWC Accounting and Tax Competition: <u>http://www.pwc.com/us/en/careers/campus/programs-events/challenge.jhtml</u>
- KPMG Gold Challenge Competition: <u>https://www.bap.org/goldguidelines</u>

Entrepreneurial Management

- Global Student Entrepreneur Awards: <u>http://www.gsea.org/</u>
- Global Social Entrepreneurship Competition:<u>http://www.foster.washington.edu/centers/gbc/globalsocialentrepreneurship</u> <u>competition/pages/gsec.aspx</u>

Finance

- National Financial Plan Competition: <u>http://www.iarfc.org/display.asp?id=145</u>
- All-America Student Analyst Competition: <u>http://www.alphaseal.com/about.html</u>
- CFA Institute Research Challenge: <u>http://www.cfainstitute.org/community/challenge/Pages/index.aspx</u>
- FMA's Forecast Competition: <u>http://www.fma.org/Student/Forecast.htm</u>
- IAFE (International Association for Financial Engineers) Student Competition <u>http://www.iaqf.org/index.php</u>

Marketing

- American Marketing Association Collegiate Case Competition: <u>http://www.marketingpower.com/Community/collegiate/Pages/case_competition.aspx</u>
- Google Online Marketing Challenge: <u>http://www.google.com/onlinechallenge/</u>
- Marketplace® Live Tournament: <u>http://www.marketplace-live.com/global-competition/global-competition.php</u>
- Russ Berrie Institute National Sales Challenge: <u>http://rbisaleschallenge.wpunj.edu/</u>

Supply Chain Management

- General Motors/Wayne State University Supply Chain Case Competition: <u>http://media.wayne.edu/2013/09/17/general-motors-supports-wayne-state-supply-chain-1</u>
- Sam M. Walton College of Business International Graduate Logistics Case Competition: http://scmr.uark.edu/gradcase.asp
- IANA Logistics & Supply Chain Management Case Competition 2013: http://www.unf.edu/coggin/trans_logist/case_competition_2013.aspx
- 2013 Student Case Competition: <u>http://www.sclcanada.org/en/student/2013-student-case-competition</u>
- APICS International Student Team Competition: <u>http://www.apics.org/sites/conference/annual/special-programs/scholars-program/international-student-team-competition</u>

Other Business Fields

- Global Management Challenge: <u>http://www.worldgmc.com/</u>
- TiE International Business Plan Competition: <u>https://www.tie.org/initiative/TiE-International-Business-plan-competition</u>

TABLES

Milestone	Due date in a 13 weeks long semester	Deliverable	Weight
1	3 rd week	5 page report	15 %
2	7 th week	Draft PSA	15 %
3	10 th week	Classroom presentation	20 %
4	13 th week	Final PSA submitted to the contest	30 %
		Peer Evaluation Forms	20 %

Table 1: Project milestones

Table 2: Factors motivating the students' HLP choice $(n=43)^{-1}$		2: Factors motivating the students' HLP choice (n=4	3)*
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Factor	Count	Percentage
Creativity and freedom	30	69.8 %
Competition	16	37.2 %
Social responsibility	15	34.9 %
Team pressure	12	27.9 %
Art and graphics skills	4	9.3 %

*Students could choose multiple options as motivators

Group	Population	Average score of other seven questions	Humanitarian logistics question score
А	16	70.5 %	86.9 %
В	14	73.1 %	82.9 %
С	12	74.8%	82.5 %
D	11	68.9%	89.1 %
Total	53	71.8 %	85.3 %
		*p-value<	< 0.001

Table 3: Analysis of the exam results that included a project question

Table 4: Distribution of student responses to the project assessment survey (n=43)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
After doing this project, I have a better understanding of humanitarian logistics and disaster relief concepts.				56%	44%
I would recommend this humanitarian logistics project to future BUS 355 students.			7%	51%	42%

FIGURES

Figure 1: A sample PSA submitted to the PSAid contest



Give smart. Give cash.

Generosity is great, but when you give non-financial donations after a disaster (such as food, water or clothing), shipping and storage costs dramatically increase the cost-per-item and the time it takes for relief to get in the hands of people who need it – plus, it's not always the right items that are donated.

When you give cash (using credit, debit or even text messages), you are providing the maximum amount of relief in the most efficient way possible – **financially and environmentally**.

Save money. Save lives. Save the planet. Give green.



