Hitting Three Birds with One Stone: Using a Case Study of United Way in Classroom Teaching[1]

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Abstract

Modern universities have multi-faceted missions, typically encompassing teaching, research, and outreach. Under financial pressure and changes in societal expectations, increased efficiency in meeting multiple missions is advocated. This article documents the use of a teaching case that involved research and resulted in community outreach. Students at Kansas State University were charged with developing fundraising campaign plans for a local United Way Chapter, using concepts covered in a risk management class. Students collected survey data that revealed giving behavior on campus, and the United Way chapter incorporated the student findings in their successful fall 2003 campaign. While few endeavors can address all missions equally well, the documented case is an example of how an activity centered in one of the university missions can be modified to make useful contributions to the other missions.

Introduction

Missions of modern universities are multi-faceted, typically encompassing teaching, research and outreach among others. Universities are expected to provide higher education, create knowledge and information, and extend that knowledge to others beyond campus. Land-grant universities are unique in the sense that their tripartite missions of teaching, research, and outreach are mandated from the federal government through the Morrill Land-Grant College Act of 1862, the Hatch Act in 1887, and the Smith-Lever Act in 1914.

Financial pressure on higher education institutions has been mounting steadily over the past several decades. Agricultural and land-grant universities have been facing additional challenges due to changes in societal expectations, reflecting a relatively smaller role of agriculture in the national economy. Recent reviews of the land-grant missions call for greater accountability and efficiency (e.g., Adelaja, 1997; Just and Huffman, 1992; Martin, 2001; Schuh, 1986; Thompson, 1997; Zimdahl, 2003; Zulauf and Tweeten, 1993).

One way to enhance efficiency is to address multiple missions simultaneously. Adelaja's view of an ideal agricultural economist, for example, is someone performing all three mandates (teaching, research, and extension) simultaneously and equally well (p. 124). This view is supported by others (Ballenger and Kouadio, 1995), and young faculty members are almost always encouraged to contribute to all university missions, even those lying outside their formal appointment (Bernardo, 2001). There are many examples of such efforts: blending graduate-level teaching and research (Schroeder, 1996), conducting research on teaching effectiveness (e.g., Barkley and Forst, 2005), and developing simulation tools that can be used in classroom teaching, public extension, and research (Koontz et al., 1995). Yet, evidence suggests that there is much more room to make the synergy among the tripartite missions more effective (Ballenger and Kouadio, 1995).

Efforts to link teaching, research, and outreach are of relevance to all NACTA members and institutions. The objective of this paper is to contribute to this dialogue by documenting the use of a teaching case that involved research and resulted in community outreach. (The full case and other materials handed out to the class are available from the author upon request.) The case was assigned in an upper-level undergraduate course at Kansas State University (K-State), charging the students to develop campaign plans for a local United Way chapter. The students needed to apply concepts taught in the course to develop their campaign plans, and to conduct a survey and interviews in order to make proposed plans realistic and empirically grounded. The student survey yielded information on giving behavior in the K-State community, and the United Way chapter incorporated the student proposed plans in their fall 2003 campaign. A record of the project's effectiveness and identified areas of improvement should help stimulate ideas for combined pursuits of multiple missions.

The remainder of the paper is organized as follows. In the next section, the objectives and history of the course and course project are explained as background. Then, the case is briefly presented. The outcomes of the course project are summarized according to the three land-grant missions. The paper concludes with take-home messages.

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Background

AGEC 680 Risk Management is offered as a senior-level undergraduate elective course for the Bachelor of Science degrees in Agricultural Economics or Agribusiness at K-State. The course was developed by the author in 2001. The course has been designed for advanced undergraduate students in agricultural economics, to understand risk inherent to agribusiness operations and to learn ways of quantifying risk and formulating risk management strategies. It consists of three modules that correspond to the first three course objectives: (1) to acquire quantitative tools to describe risk, (2) to understand the theory on how individuals react to risk, and (3) to understand principles of risk management tools to design situation-specific strategies. Additionally, the student completing the course should (4) become proficient with a simulation software package to analyze and manage risk. To achieve this last objective, the class has used @Risk© by Palisade Corporation in 2001 and 2002, and SIMETAR©, a software package developed by Richardson et al. at Texas A&M University, in 2003.

To promote students' achievement of all objectives, a final project is assigned near the end of the semester. Since 2001, it has always been a group project. In the first two years, loosely defined cases were developed for each group of students. For the spring of 2003, a single case with more structure that involved a local entity was assigned for all groups. The author approached the local United Way chapterUnited Way of Riley County (UWRC)which had struggled with their 2002 campaignto obtain information for the case. The project was posted on the course web page on March 31.

The Case

Overview of the Client

UWRC is one of approximately 1,400 community-based United Way organizations around the nation. United Way organizations raise and distribute funds to support activities and service to make impacts in communities. Its grass-root activities can be traced back to the late 1800s. Each local United Way organization is independent and separately incorporated. They pay less than 1% of their raised funds to United Way of America, which entitles them to use the logo and themes. The national membership also provides access to resources and networking opportunities with other local United Way groups.

The mission statement of UWRC is "to increase the organized capacity of people to care for one another by uniting diverse elements in an area wide effort to plan, support, deliver, and monitor effective programs that are responsive to current community needs." UWRC help to support the services of 13 agencies and two programs in Riley County, Kansas, including children-oriented organizations, such as Big Brothers Big Sisters, and groups to help meet urgent needs of people, such as the Salvation Army, the Emergency Shelter, and the Crisis Center.

UWRC is operated by volunteers, except for its executive director, an administrative assistant, and several student interns, who are employed. The members of the Board of Directors are all volunteers and oversee committees that monitor the funded agencies and programs to ensure efficient allocation of funds.

In 2002, UWRC invested $370,875 to fund local agencies and programs. However, the funds raised during the 2002 campaign fell short of the target, and 2003 payment allocations had to be cut. In order to sufficiently fund the activities in 2004, the fall 2003 campaign needed to raise at least $500,000. One component of the UWRC campaign takes place on the K-State campus. In terms of on-campus campaigns, K-State had compared poorly with the fellow Big 12 schools in recent years, ranking 12th both in the percentage of total employees who give and in per capita contributions. In 1998, for example, the University of Kansas, which has fewer faculty and staff members, raised more than twice as much as K-State's $75,693.

The Assignment

The 2003 fundraising target for the K-State campaign was (arbitrarily) set at $150,000, which was roughly double the amount raised from the 2002 campaign. The students were charged with preparing and presenting a report to the executive director and the Board of Directors on how UWRC can improve its fall K-State campaign, which runs from September through November. The assignment consisted of two components: researching people's motivations to give and fundraising techniques, and proposing specific fundraising plans that UWRC could implement.

Research Component. The research component of the assignment consisted of three parts: (I) Internet- and library-based research, (II) e-mail or phone interviews with faculty, staff, and students at K-State, and (III) an e-mail or phone interview with the director of on-campus United Way campaigns at one of the other Big 12 schools. In order to provide useful and reliable results to UWRC, subjects for (II) and (III) were not to overlap across groups; each group was required to draw its sample of survey subjects from a different college at K-State, and each group was assigned to a different Big 12 University to interview.

In the on-campus interviews (II), students were required to ask the same core questions to all subjects regarding their familiarity with UWRC and reasons why they would or would not contribute to UWRC. To ensure reliability of responses, a set of instructions on surveying was provided. The students were encouraged to add questions to the provided base survey to collect information they thought was important to UWRC. In order to maintain the representativeness of the overall sample, the sample of interviewees for each group was required to include a total of at least 50 individuals, with, a minimum of 15 faculty and 15 staff members, and was to include no more than five respondents from the same department (wherever feasible). Because all students in the class were affiliated with the College of Agriculture (COA), all groups were allowed to include people from COA in their sample in addition to their assigned college, but no more than five from each demographic category (faculty, staff, and student). (Given the involvement of human subjects, the Institutional Review Board at K-State was notified of the project. In typical survey projects, anonymity of subjects is a necessary condition for the Board's approval. Yet in this case, subjects' names had to be explicitly reported to the instructor in order to evaluate student performance. The application was initially denied, but eventually, approval was granted.) In (III), the students were instructed to learn about fundraising campaigns at the other Big 12 schools that had been proven successful.

Proposal Component. The proposal component of the assignment needed to include a detailed description of how the planned campaign was to be implemented, including (i) duration, (ii) an estimate of its cost (volunteer time commitment and materials), and (iii) a simulated probability distribution of contributions raised by the campaign. In order to obtain (iii), the students were instructed to specify subjective probability distributions of the number of participants and the average gift size, and justify the specifications based on the findings from the first part of the assignment. The key output variables in their stochastic campaign plans were the total contributions (net of material costs) and funds raised per hour of voluntary labor. The sum of contributions of proposed fundraising campaigns (net of material costs) had to yield at least a 40% chance of achieving the on-campus target of $150,000. They were instructed to add more campaign activities to their proposals until this condition was met.

Output Format. Students were required to submit a written paper and give an oral presentation to the UWRC Board members. The written paper was limited to 12 pages of text excluding tables, figures, and references. In addition, three appendices were required: a list of subjects, complete survey responses, and a print-out of the spreadsheet analysis of the proposed campaign. The oral presentation had to be rehearsed and was limited to 20 minutes followed by a question-and-answer session. Each member of the group was required to participate, and the use of visual aids, such as PowerPoint slides, was expected.

Lastly, each student was required to provide comments to two other groups through a prepared questionnaire. The questionnaire asked the students to compare the findings of their own group's surveys with those of the presenting group, to identify the most and least preferred campaign plans from those presented by the group based on perceived feasibility, and to explain their reasoning.

Teaching Outcomes

On April 1, the day after the case was made available to the class on the course web page, the vice president of the UWRC Board presented the case in class to help motivate the students. The students were responsive to his talk and asked numerous questions. At the end of the class period, the students were asked to submit names of classmates they preferred and did not prefer to work with in groups. Based on their preferences, the 23 students who were enrolled in the class were divided into five groups of three to four students. During the following class period, more detailed instructions were provided on how to conduct the survey.

The papers were submitted on April 29, and all were at or above acceptable quality. (The grading matrix used in the evaluation is available from the author upon request.) All groups completed the research component as instructed. Three groups not only summarized the survey responses but also analyzed the responses by demographics. Four groups, in particular, were creative with their campaign proposals, three of which also supported their plans with sound reasoning. Most groups provided reasonable cost considerations as well.

Several Board members plus the executive director attended the presentations during the last two class periods. The students appeared to be surprised at the seriousness of UWRC's interest in their work at first, but proceeded with their presentation with professionalism. Some students had impressive presentation skills. Many carefully supported their recommendations with reasoning and facts. The students showed a great deal of pride in their original campaign plans. They were pleased to be able to share the student views on giving and were comfortable when asked questions by the Board members. At the end of the second day of presentations, the executive director thanked the class and commented that their presentations and reports compared favorably with those by professional research firms that she and many of the Board members had hired in the past.

The technical aspects of the project gauged how well the course objectives were achieved by the students. Namely, course objective (1) would have been met if students could specify subjective probability distributions of the number of givers and the average gift size based on the survey responses and simulate the probability distribution of the amount raised from the proposed campaigns. Course objectives (2) and (3) would have been achieved if simulated campaign contributions were accurately interpreted and the final simulated campaign contributions met the given criteria of raising

$150,000 with at least a 40% chance. Their analysis should have been conducted using SIMETAR©, which would address course objective (4).

The most challenging was objective (1). An example of full credit work was as follows. A group proposed a campaign that primarily targeted students. To encourage participation, they proposed to offer a prize of a semester's worth of free tuition to a randomly selected student donor. The group expected an average gift of about $10 per person "due to the fact that the survey results indicate most students would be willing to donate around $10 to the UWRC fundraising campaign," with participation from about 1,500 students, which they deduced from the number of students on campus and the size of the prize relative to donation. They specified probability distributions of the gift size and the number of participants as normal, "since the variables (gift size and number of students) had countless outcomes" with means equal to the average numbers they expected and standard deviations equal to "what we deemed a reasonable range for the variables." They truncated the gift size distribution at zero, "since it does not make sense to have a negative amount for the donation a person makes." (Copies of sample students' papers are available from the author upon request.).

Two groups justified their subjective probability distributions with their survey findings as in the example above. One group provided a justification that was not based on their survey findings. One group simulated the distribution of campaign contributions but failed to provide any justification for their subjective probability distributions. One group simply did not conduct any simulation analysis.

Students demonstrated their achievement of objectives (2), (3), and (4) more successfully. All but one group provided adequate interpretations of the simulated results and proved that they could use the simulation software. For example, a group proposed a total of three campaigns, simulated a probability distribution of total contributions and interpreted the results as follows: "Based on our predictions for the results of the proposed campaigns, the probability of raising $150,000 or more in contributions is approximately 45%. ... Using our proposed campaigns, UWRC should expect to yield between $100,000 and $200,000 from its campaign with the most likely results being between $125,000 and $175,000. These results will be highly dependent on the amount of promoting and the strength of the public relations that the UWRC volunteers perform on the K-State campus."

Overall, the majority of the students demonstrated the achievement of all four course objectives through the project. Students in the group which failed to conduct any simulation analysis demonstrated through other course assignments that their achievements of the course objectives were comparable to other students. This reiterates how critical it is to have multiple tools to assess student performance. Also, additional guidance on the specifics of the project might have improved teaching outcomes.

Research Outcomes

The project yielded two types of research outcomes. First, the instructor researched facts and the economics of charitable giving and included the findings in the case as background information to the class. Second, students' surveys revealed the level of understanding of UWRC and people's motivations for giving on the K-State campus, which were likely valuable to UWRC and led to the students' creative campaign proposals. Because this paper focuses on the linkage among teaching, research, and outreach, only the student findings are presented below. (The background research by the instructor is included the case, which is available from the author upon request.)

Survey Findings

There was a wide variation in knowledge of UWRC across colleges at K-State. About 40% or more of the interviewees in each college were familiar with UWRC. Many staff and faculty members indicated that more personal contacts and additional information on UWRC would increase their contributions. Several students indicated their willingness to donate time. Most faculty and staff were glad to assist the students. A few refused, citing reasons such as too many survey requests, lack of time, or general negative attitudes towards the United Way.

The average willingness to donate of students ranged from $6.16 to $7.34 and that of faculty and staff from $23.13 to $28.75. The results from one group also showed that those who lived in Manhattan, Kansas (where K-State is located) for more than 10 years were, on average, willing to donate three to four times more than newer residents.

Other Big 12 schools used different fundraising tactics. Personal contacts from peers, fund-raising goals for each group or department, paycheck deductions, and involvement of the senior administration appeared to be effective. Student contributions at the University of Kansas, the highest in the Big 12, were raised mainly through proceeds from tickets to an all-day skit program.

Student Proposed Campaign Plans

Proposed campaigns that target faculty and staff included payroll deductions and designating unit-level chairpersons to contact their peers directly, similar to the schemes employed in other Big 12 schools. In addition, student proposals suggested constructive ways to make contact with the wider campus community, offering incentives, employing some sort of competition among donors, and recruiting the Greek community for which philanthropic activities are a mandate. (The Greek community at K-State, consisting of 24 national fraternities and 11 national sororities, is recognized as one of the most well organized and active such communities in the nation (Bohn, 2003).) As a specific way to reach the campus community, one group suggested designing slogans that showed the donors what their donations could buy for a supported agency (e.g., blankets for the Emergency Shelter). Proposed incentives included a drawing of a semester's worth of tuition and football tickets. Two groups suggested fund-raising events at popular K-State football games. Other original ideas involved spectator donations to a stunt performed by faculty members (such as games of mud volleyball and eating something edible but unappetizing) and a campus-wide yard sale.

Outreach Outcomes

After the presentations, UWRC received electronic versions of the students' papers to circulate among the Board members who missed the presentations. Also, a summary of the student feedback regarding the perceived feasibility of other groups' ideas was prepared and forwarded to UWRC.

Many changes were implemented for UWRC's 2003 campaign, making it difficult to attribute certain changes to the students' reports. However, there is little doubt that some of the ideas came from or were supported by their work. First, many more United Way campaign signs were posted around campus. Because students' survey found that many people felt they had not been specifically asked to donate in previous years, the signs explicitly asked to “give to United Way.” A redesigned campaign brochure listed what certain donation amounts can help accomplish. In the kickoff event, UWRC had a prize drawing and an autograph session by K-State football players, and also had a couple representatives from the United Way agencies and the University president address the crowd. In the closing event, they invited the K-State women's basketball coach to speak and held a drawing for women's basketball tickets and team-autographed items.

Faculty and staff members were contacted by a unit representative with a personal letter, in place of a mass mailing from the University president. Contributors were eligible for prizes, which included a season football ticket. Payroll deduction was available as a payment option as in previous years.

A local newspaper printed an article covering the contribution of the students in AGEC680 to the United Way campaign (Manhattan Mercury, 2003). The executive director was quoted as being “struck by the professionalism of the students and the presentations. It certainly speaks well of the quality of their instruction, and the insights they provided were very compelling.” She also told the reporter that the student research “helped to confirm and enhance the organization's knowledge of donor motivation, providing new insight to the K-State campaign” (Manhattan Mercury, 2003, C10).

As of March 2004, the UWRC collected $592,418 from the 2003 campaign, exceeding their overall campaign goal of $589,000 (Manhattan Mercury, 2004). Their primary goal for the K-State campaign was to increase the number of donors on campus, and this year, they had just over 1,000 faculty and staff members donating, compared to 672 in 2002. Correspondingly, the total funds raised from the K-State campaign increased by over 20% from last year, bringing in more than $105,000 (UWRC, 2004).

Regardless of how marginally the course project impacted the overall success of the 2003 UWRC K-State campaign, the awareness of UWRC certainly increased among people who were interviewed, and the students could be proud of their contributions. UWRC repeatedly mentioned the class (thus, K-State's) involvement in their campaign to promote the local interest, and while lacking any measurable evidence on the impact, it was beneficial for the University to be associated with promoting a local social cause.

Summary

As demands for university functions intensify, synergy of efforts pursuing multiple university missions is increasingly important. This project is a promising example of future involvement of University in the local community, and of how multiple missions can be addressed simultaneously in creative ways. The project yielded five specific take-home messages for assigning similar course assignments in the future.

Three messages are related to improving teaching outcomes. First, it is important to show how the course project is related to the course objectives. Explicitly associating the project components to specific course objectives might have prevented one of the groups from failing to conduct simulation analysis. Second, the use of a non-agricultural application may result in resistance among some students in agriculture. It is important to explain why the concepts applied in this type of project can be applied to other projects including agricultural examples. Third, the instructor needs to ensure that students understand the difference in the decision-making process between a non-profit and for-profit business. For almost all the students, this was the first time they had been exposed to a non-profit business, and some education was necessary prior to starting the project.

A fourth point is to make sure that an instructor clears potential road blocks for such projects well in advance of the assignment being given to the students. One such road block in this case, which is specific to using research as course assignments, was the Institutional Review Board (IRB). Because the survey respondents were not randomly selected and their names were required to be documented, the IRB had many questions that needed clarification prior to approving the project.

A fifth message is to take extra caution when the project deals with sensitive and value-laden issues. For example, some people who declined to participate in the survey may have been offended by the survey which dealt with charitable giving. Also, the students received strongly worded letters pointing out that UWRC does not support Boy Scouts. (While the United Way at the national level withdrew its support from the Boy Scouts, the Boy Scouts in Manhattan, KS, had been receiving support from UWRC.)

More broadly, what implications does this documented effort provide for future endeavors of addressing multiple missions more efficiently? The approach taken here reflects the author's belief that these joint efforts will not achieve all missions equally well but rather will necessarily be the most effective in one or two of the missions. This case was foremost a course project, and it was important that it effectively helped achieve the stated course objectives. Its outreach outcomes were also quite effective, and its effectiveness might arguably been enhanced through student participation. Given successes in the two missions, the author feels it was sufficient that research outcomes were original if somewhat pedestrian. The project presented here is certainly not suitable for, or will be sought after by, all members of our profession. With a little flexibility, however, there are numerous opportunities to extend our current efforts to make marginal but positive contributions towards the multiple missions of our institutions.

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