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Predictive modeling of alumni donors: An engagement model for fundraising in postsecondary education

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Predictive Modeling of Alumni Donors: An Engagement Model for Fundraising in
Postsecondary Education
Nicholas Rau

A dissertation submitted to the Graduate Faculty of
JAMES MADISON UNIVERSITY
In
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School of Strategic Leadership

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Dedication

This dissertation is dedicated to my family and friends, without their support, patience, and belief in my ideas, none of this would have come to fruition. Special dedication to my parents who have always let me choose my own path, due to their faith and trust in their teachings and my determination.

Also, this body of work is dedicated especially to my wife, Jen, who has been with me climbing on two-by-two through this process. While I have a handful of singular accomplishments, there is no single greater accomplishment in my life, than what together, we have been able to achieve. We have each reached our own summit of academic achievement, and are better both personally and professionally because of it.

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The supportive and encouraging words from the Office of Annual Giving were also very much appreciated, special thanks to Taylor Schwalbach for reminding me that in fundraising we must make “data-driven decisions, and people-based actions.”

Table of Contents

List of Tables	vi
Abstract	vii
I. Introduction	1
II. Literature Review	6
Determinants of Giving to Post Secondary Institutions	6
Potential Donor Motivations	9
Student Engagement	14
Alumni Behavior	16
Current Acquisition Tactics of Potential Donors	17
III. Methods	20
Purpose	20
Hypotheses	20
Participants	21
Instruments	21
National Survey of Student Engagement	21
Alumni/Institutional Data	23
Procedures	24
Selected Test Population	24
Differential Scripting	24
IV. Data Analysis	27
Participant data	27
Exclusion of participants from the calling segments	30
Classification of calling segments	31
Undergraduate engagement variables	31
Alumni Involvement and Activity variable	32
Assignment to Calling Segments	33
Calling Sequence	34
Potential Outcomes of Calling	35
Additional data for research consideration	36
Hypotheses	39
Actual Calling Segment Outcomes	40

Interactions and Main Effects of Engagement and Script	41
Effects of Student Engagement and Alumni Activity on Donations	44
Testing the Predicted Classification of the Model	46
Testing the Avoidance of Participants	47
V. Discussion	51
Implications.....	52
Study Limitations.....	53
Appendix 1: NSSE variables and items	56
Appendix 2: Differential Scripts.....	59
References.....	64

List of Tables

Table 2.1 Graduates with Student Loans	8
Table 3.1 Participants per class.....	21
Table 4.1 Descriptive Statistics for NSSE scales and Invitations.....	28
Table 4.2 Calibration Sample Senior 2004	29
Table 4.3 Cross Validation Sample	30
Table 4.4 Ratio of Alumni Activity	33
Table 4.5 Distribution of Student Engagement and Alumni Activity by Script Type.....	34
Table 4.6 Effectiveness scale of telefund effectiveness.....	36
Table 4.7 Non-financial outcome of calling	38
Table 4.8 Descriptive Statistics for Previous Solicitations and Non-Solicitations	39
Table 4.9 Connected phone numbers	40
Table 4.10 Financial Result of Calling – Post 30 days	41
Table 4.11 Means Tables for Scripts by Calling Segments	43
Table 4.12 ANOVA Table – For Engagement, Activity, and Scripts	44
Table 4.13 Means Table for Scripts by Calling Segments.....	45
Table 4.14 ANOVA Table – For Engagement, Activity, and Scripts	46
Table 4.15 Avoidance Scale	48
Table 4.16 Descriptive Statistics for the Avoid variable in terms of Calling Segments ..	49
Table 4.17 ANOVA Table – Student Engagement, Alumni Activity.	50

Abstract

Postsecondary education institutions only have a limited amount of time and resources to direct at acquiring new donors for private funding and support. More research is needed to better understand why an individual chooses to give, and to utilize that understanding to create an improved, more informed practice of donor acquisition. By using the National Survey of Student Engagement (NSSE), student engagement and alumni activity are explored as possible determinants in predicting donors. Further testing of this predictive model via utilizing a telefund calling center to solicit individuals allows for testing of differential scripts when speaking with alumni. This study expands on previous research regarding student engagement, alumni activities, and acquisition tactics. Findings include support for using differential scripts based on student engagement and alumni activity when soliciting potential donors. Also, support for increased alumni activity leading to a greater number of responses to phone calls was found as well. While this study did focus on young alumni who graduated ten years and fewer, at only one institution, the study could be replicated at any institution with previous participation in the NSSE. This study provides an initial foundation and support for the need to further study the long term effects of student engagement within alumni fundraising and support.

Predictive Modeling of Alumni Donors: An Engagement Model for Fundraising in Postsecondary Education

Introduction

Postsecondary education in the United States is encountering a variety of challenges in funding and has been exploring a variety of strategies and tactics to counter these challenges over the course of the last fifteen years. Most institutions within postsecondary education are facing decreasing levels of allocated public funds with an increase in costs of post-secondary education due to increasing demands from the public for accessibility and opportunity. This phenomenon has created a heavier burden on public institutions to make up the difference with fundraising.

The formula for the funding of public post-secondary education institutions is, on the surface, limited to a few essential inputs: tuition, public government funding through state and federal allocations, grants and external partnerships, and private funds. Public allocation for institutions has been steadily decreasing as a percentage of total government spending (Becker and Lewis, 1992; Duderstadt and Womack, 2003).

The public, however, has demanded that institutions grow in size, offer more services, and provide more comprehensive programs which drives up the cost of post-secondary education as result of increased institutional spending. Many grants and external partnerships are funded through support from state and federal allocations, or from the support of private foundations, which have been under intense financial pressure due to the economic downturn of the last decade. Tuition for postsecondary institutions has been on the rise in the past decades at a rate that some would call alarming, as average tuition and fees for public institutions has risen 5.2% per year beyond inflation

since 2002 (The College Board, 2014). The tolerance for continuing this trend of increased tuition is waning in the eyes of the public. With the funding of postsecondary education quickly approaching a ceiling, the only input left is to increase private funds to institutions.

The responsibility for increasing private funds often sits squarely on the shoulders of the development and advancement offices within institutions. While major gifts receive the lion's share of attention and headlines in news articles, the foundation of institutional support begins with annual gifts. By cultivating annual donors while also acquiring new donors, the pipeline to receive major gifts can be enhanced. More importantly, increasing donors at all levels can help institutions in developing more stable funding models based on private support.

However, acquiring new donors is much more resource intensive than retaining those who give on a regular, annual basis. Once an individual has made a gift, the individual transitions to a donor, and institutions have methods and staff members dedicated to the stewardship of these donors. The task of acquiring new donors -- those individuals who do not reside in institutional databases -- present specific challenges unique to acquisition of donors.

In acquiring new donors, it is important to understand these individuals do not have a history of giving to the institution. While this may be a basic statement, its importance should not be overlooked. If the default is not to give to the institution, then the individual must make an active choice to change their current behavior to do something different. Institutions only have a limited amount of time and resources to direct at acquiring new donors.

More research is needed to better understand why an individual chooses to give, and to utilize that understanding to create an improved, more informed practice of donor acquisition. The point is not to reach out to all potential donors, but to identify those who have an increased propensity to donate and understand their motivations.

By working in conjunction with student and academic affairs, programs that are of particular importance to the institution or present a great value to the institutional community, can be positioned appropriately for support. While mega-gifts often come from a donor with a clear and focused vision for the outcome of the gift; annual and first-time donors often do not have a clear and focused vision for their gift, but rather, want it to go to something that will make a difference. The gift is essentially an extension of the individual's own identification with the organization. Merely having an aggressive marketing slogan or branding effort does not yield institutional identification. As Sargeant, Ford, and West (2006) articulated, trust and commitment to an organization stems from the specific impact an organization has on its beneficiaries and how that impact is communicated externally. The institution's actions and programs must uniquely align with the marketing and outreach of the institution to inspire increased fundraising activity.

In an effort to better understand the relationship of institutional (both student and alumni) programs and alumni donor behavior, Rau and Erwin (2014) conducted a study model predicting individuals to be either non-donors or donors to the institution, by using institutional variables such as student involvement, co-curricular activities, and alumni activities. Student involvement and alumni activities were found to be predictive of alumni donations, post-graduation.

With these challenges and promises in mind, this study will continue to explore additional analytical models to improve upon current annual giving fundraising approaches. By combining components of an alumnus' student experience, participation in alumni activities, and current behavior into a predictive model, a better understanding of fundraising can be achieved. One's student experience and participation in student engagement can help in determining past affinity with the institution and participation in alumni activities can assist in determining more recent affinity with the institution. This leads to a more complete understanding of the inclination for an individual to donate.

It is important to keep in mind that postsecondary education is not a charity in the public's eyes but rather a commodity (Wastyn, 2009) and that perspective on college may impact the viewpoint of potential alumni donors. A gift to postsecondary education is less about the donor making a charitable gift, and more about making an investment in postsecondary education.

A critical component of fundraising is the message communicated to potential donors. There are three main direct response efforts employed by institutions to inform and solicit potential annual donors: mail, email, and the telefund. These three efforts generally work in conjunction; however, the telefund is unique in that it allows for a conversation between the institution and the potential donor. The dialogue between the institution and potential donor is invaluable. Questions can be asked and answered, and topics of conversation can be tailored specifically to the interests of the potential donor.

The script used by a caller during a telefund solicitation is instrumental in the outcome, as it provides the caller with the foundation of the conversation and talking points throughout the conversation. There is a short window of time while the telefund

caller is speaking with the potential donor in which the potential donor will decide to make a donation, so the message communicated must be well designed.

By implementing the proposed model of predicting donors on actual new alumni donor acquisition calling segments, custom scripts can be designed based on the output of the analytical model. Instead of simply using a generic script or a script that solicits for a fund important to the institution, a more donor-centric script could be designed and utilized. This study seeks to test both the statistical and practical significance of an analytic model and the effectiveness of generic and custom donor specific scripts in the acquisition of potential donors via the telefund direct response method. By calling each participant in the predictive model, inferences can be made on the impact of student engagement and alumni activity on donation participation. Also, any participants who do not answer the phone or whose phone numbers are still the phone numbers of the parent(s) of the participant, inferences about one's avoidance of the institution can be made as well. This concept of avoidance will be explored further in the Methods and Result section.

The model should inform not only who is predisposed to donate, but also highlight what variables of student engagement and alumni activities institutions might enhance to foster alumni support. By expanding on previous research regarding student engagement, alumni activities, and acquisition tactics, the hope is to better inform the techniques of predicting, engaging, and acquiring alumni donors.

Literature Review

There is a need for postsecondary institutions to adapt to the changing donor landscape and think differently about their fundraising practices (Stevick, 2010). Further, Stevick warns that previous methods of fundraising will be unsuccessful, unless a more successful strategy of potential donor identification is implemented. This chapter provides a scholarly overview of the determinants of giving, previous predictive models of giving, student engagement, alumni behavior and current trends in acquisition tactics of potential donors. This chapter also identifies gaps in the research and areas in which this study seeks to advance the research and provide guidance for successful strategy of potential donor identification.

Determinants of Giving to Postsecondary Institutions

Past research on what determines one's decision to donate has found a wide variety of variables that lead to giving including financial resources, religious inclination, psychological motivations, and demographics such as gender, employment, and marital status (Clotfelter 1997, Mesch et al. 2006, Schervish 1997). Wang and Graddy (2008) articulate in addition to the variety of variables influencing one's decision to donate, there is both the inclination and capacity to donate. To bring focus to the wide range of potential variables that determines one's decision to donate, this study seeks to further understand the foundations and motivations that support the inclination for an alumnus to give. Specifically, the variables used in this study will be items that institutions have influence over in determining the outcome.

The motivation and inclination to give to postsecondary education may be a more complex issue than charitable contributions to other non-profits. Not all giving

opportunities are seen as equal, according to Wastyn (2009), postsecondary education donors do not view their donation as giving to a charity as they do not perceive postsecondary institutions as charitable organizations. The Chronicle of Philanthropy (2005) found that in terms of priority, financially supporting one's alma mater ranks sixth out of nine in giving.

Postsecondary education is unique in contrast to most non-profit institutions because those who benefit from postsecondary education are students, many of whom have some type of financial aid, which must be paid back upon graduating. Research on the impact of financial aid on the likelihood to give is mixed. Cunningham and Cochifano (2002) did not find a relationship between need-based loans and alumni giving. However, Marr, Mullin, and Siegfried (2005) found that the type of financial aid did predict whether an alumnus would donate or not. Specifically, need based loans reduced the likelihood of donating in the first eight years after graduation by 8% to 16%, across all institutions. Need-based scholarships though, increased the likelihood of giving by 5% to 13%, however merit-based scholarships were shown not have a statistically significant relationship.

Meer and Rosen (2012) also explored the potential impact of financial aid on the likelihood of donating, and findings were similar to those of Marr, Mullin, and Siegfried (2005). Loans decreased likelihood of later giving; scholarships increased the likelihood; and on-campus jobs showed no specific effect on likelihood to give as alumni. The impact financial aid has on future alumni donations is not conclusive based on previous research, but it provides context given that roughly half of the graduates in the last decade from this institution had some type of student loan, as the State Council of Higher

Education for Virginia reported in 2014. Table 2.1 outlines the percentage of graduates with student loans and the mean for each graduating class of this institution in this study.

Table 2.1

Graduates with Student Loans

Year	N (%)	Mean Debt
2004-05	1575 (47%)	\$24,020
2005-06	1736 (50%)	\$26,035
2006-07	1722 (50%)	\$29,761
2007-08	1698 (48%)	\$30,715
2008-09	1846 (51%)	\$31,816

There is a focus for most development and annual giving offices at postsecondary institutions on the participation of alumni donors. This stems from the widely held belief that those individuals who graduated, those who experienced the campus life, and those who directly benefited from the institution would be those individuals with the most affinity to donate. The alumnus' current satisfaction, past relationship as student, and current relationships with the institution influences their inclination to donate (McDearmon, 2010, Gaier 2005). This is not a static or one-time phenomenon, as individuals can decide to give one year and not the next, or to simply give spontaneously after a history of not giving. Most institutions record alumni donor behavior from an annual perspective.

Kelleher (2011) noted at some institutions, relationship development programs begin prior to students arriving on campus with the specific intent of providing an

opportunity for them to start identifying with the institution to hopefully make the transition to being alumni donors easier post-graduation. Further it is suggested that an aim of the institution should be for the transition from being a student and becoming an alumnus to be seamless as the student has had ample time to identify with the institution (Kelleher, 2011, Temporal & Trott, 2011). This notion of identification with the institution through engagement as both a student and an alumnus will be expanded upon in forthcoming sections of this chapter and the third chapter.

Potential Donor Motivations

Mael and Ashforth (1992) utilized student specific variables of mentor relationship, total years at school, and satisfaction to predict the likelihood of making financial contributions using organizational identification as a theoretical foundation. The organizational identification is based within social identity theory, in which an individual's own identity is directly related to the organization in which he or she belong to or a member. All graduates of institutions are perceived as members, as alumni, and further exploring an alumnus' organizational identification with their alma mater may prove insightful. As Mael and Ashforth (1992) found, the identification of alumni to their alma mater did significantly relate to the prediction of participation in alumni activities and financial contributions.

Lindhal and Winship (1992) used a logit model to predict donors at three specific giving levels, large gifts (more than \$500 average gift), moderate-level gifts (\$499 - \$100 average gift), and low-level gifts (less than \$100). The recency and size of past giving was the largest contributor to predicting future donors across all levels, they found for

moderate-level donors capacity as important and in low-level donors participation in university programs was important.

Clotfelter (2002) used a logistic regression model based on four cohorts of graduates ranging from 1950s to 1970s, using variables based on the current status of the individual (income, employment, level of education) and their current level of satisfaction with the institution. The model provided support for two main factors in predicting donors, income and satisfaction with the institution. Clotfelter (2002) also found a high correlation with satisfaction and the variable mentor which was defined as having at least one faculty or staff member of the institution take an interest in the alumnus. This correlation of satisfaction and mentor provides some additional context to satisfaction with the student experience. There are differential aspects of the student experience and additional research is needed to further understand the relationship between the student experience and predicting future donors.

Cunningham and Cochi-Ficano (2002) developed a robust equation for determining likelihood of giving, based on both student and institutional variables. The authors used SAT scores as a proxy for student quality and created a measure called “institutional value added” composed of three variables, the faculty-student ratio, the percentage of full-time faculty with a doctorate, and the number of bound volumes in the library per student. The authors claimed these three variables represented the institution’s ability to provide resources that would enhance the educational value to the students. This approach by the authors was one of the first studies to connect both student data variables and institutional value variables to future alumni donations. This study found that a lower student-faculty ratio led to increased donations, potentially due to the increased

likelihood of developing a relationship with a member of the institution. This effect is consistent with previous research supporting how when a member of the institution takes an interest in individual students there is increased giving. Also, this gives support for utilizing satisfaction and the quality of campus relationships as predictor variables for determining alumni giving.

The trend in research has moved from the Mael and Ashforth (1992) model of broad identification with the institution to student or institutional experiences that are specific to the individual. By creating predictive models focused on the donor and their experiences with the institution the research is moving to a more donor-centric model based on institutional experiences. An advantage of this approach is that it provides specific details on how institutions might have opportunities to enhance programs or services that resonate with donors and their experience.

Liu (2006) created a predictive model of anticipated donor contributions for public institutions, basing the model on institutional factors such as alumni size, institutional quality defined by the author as rankings in the *US News and World Report*, the expenditure per each full-time equivalent employee, and historical data on the fundraising of an institution, while also considering the environmental factors of state funding and economic health of the state in which the institution is located. The study found that being ranked higher on *US News and World Report* is positively associated with alumni giving, and increases in state funding and taxes yields a slight drop in alumni donations.

While Liu's (2006) results are significant, the application to actual campus life or day-to-day administration of the institution is limited. From a statistical perspective, this

model provides a suitable foundation for using institutional metrics to predict alumni giving, however the design is focused on the macro-level of institutions, instead of the student or alumni level.

Sun, Hoffman, and Grady (2007) proposed an alumni-giving decision model, with the alumni donation being the outcome of the student experience, alumni experience, alumni motivation, and demographic predictor variables. The data was obtained through utilizing a proprietary survey used by the institution created using focus groups from 12 institutions for alumni to provide details on their student and alumni experiences. Using factor analysis, student experience had three main factors that were used as predictor variables. The first factor by Sun, Hoffman, Grady (2007) was named student experience-impact on career, composed of the following items:

- “How well did the highest degree from the university prepare you for commitment to continuous learning?...to new career opportunities? ...deepening understanding and commitment to personal development?...further graduate education?” (pg. 318)

The second student experience factor as named by Sun et al, student experience-relationships combined the following items:

- “How did what you learned about life (on campus) affect your student experience?
- How did exposure to new things (on campus) affect your student experience?
- How did attending athletic events affect your student experience?
- How did relationships with other students affect your student experience?
- How did relationships with faculty affect your student experience?”(pg. 318)

The third factor of student experience, student experience-extracurricular activities used the following items:

- “How did student leadership opportunities affect your student experience?
- How did participation in fraternity/ sorority affect your student experience?
- How did attending culture events affect your student experience?
- How did attending athletic events affect your student experience?
- How did orientation for new students affect your student experience?” (pg. 318)

These researchers used these factors as predictor variables for creating a discriminant analysis function to predict if an alumnus would donate and if there were future plans to donate. The study suggests that those with greater satisfaction in their student experience were more likely to report that they would donate. The study also provided support that satisfaction with the alumni experience and high alumni motivation was related to reporting a likelihood of donating in the future.

The design of Sun, Hoffman, and Grady’s model is helpful as a foundation for predicting potential alumni donors, but the variables used in this model are too broad to pinpoint what specifically about a satisfied student experience is beneficial in leading an individual to be a donor. The student experience factors in this study were taken from responses on a survey, in which the alumni were asked to think back on their experience and not data from when the individuals were students. Also the outcome variable of alumni donations was taken from a survey item of how likely one is to donate, not actual donations.

In the current study, the predictor variables come from the National Survey of Student Engagement (NSSE), used at over 1500 institutions and widely accepted as the leading survey in engagement, not a proprietary survey. Current students complete the NSSE and therefore the attitudes and responses are based as the student experience is happening to the students, unlike other alumni surveys that ask the individual to reflect

upon past experiences. The NSSE has validated scales and items allowing for replication of the current study at participating institutions. The prediction of donations will be based on current donations from the sample group, and the predictive model will be tested on solicitations to determine practical significance.

Student Engagement

More recent research has utilized not only predictive analytic models but also models based on the donor as both a student and alumnus. Drezner (2011) highlights the importance of the changing landscape between student affairs and university advancement, suggesting it is a growing relationship in which the two divisions are partnering together at an increasing number of institutions. Further, Rissmeyer (2010) suggests the very of work of student affairs professionals provides the foundation for successful fundraising. The student experience is associated with the thoughts and feelings that alumni have towards the institution. Harrison, Mitchell, and Peterson (1995) provides support along with Marr, Mullin, and Seigfried (2005) that members of extracurricular activities, such as greek life and athletics participate in donating more than those who were not involved as students.

The National Survey of Student Engagement was designed to measure a wide variety of student experiences, from both in and outside of the classroom. Its first administration was in 2000, and since then has been used at over 1,500 institutions by roughly 4 million students (The Trustees of Indiana University, 2013). The NSSE data have been used by institutions to support increasing resources for student services and as a tool to help prospective students understand how their institution compares to other schools.

Past research with the NSSE has yielded broad categories of student engagement measures available for institutions to utilize: (1) Deep Approaches to Learning (2) Satisfaction scales, (3) Gains scales, and (4) Pike's Scaletts (The Trustees of Indiana University, 2013, Rau and Erwin, 2014).

According to the Indiana University Center for Postsecondary Research, the Deep Approaches to Learning examine "the underlying meaning of an issue, not just surface knowledge, emphasizing a commitment to understanding and reflecting on relationships between pieces of information rather than rote memorization" (Trustees of Indiana University, 2013, Deep Approaches to Learning section, para. 1).

The Satisfaction scales explore the overall student satisfaction with the institution. The Gains scales "explore the degree to which students report having made gains in a variety of personal, practical, and general education competency areas as a result of their undergraduate education" (Trustees of Indiana University, 2013, Gains section, para. 1).

Pike's Scaletts is a collection of eleven subscales; each explores areas of student engagement and behavior, from in-class interactions, environmental support, and out-of-class interactions with educational experiences (The Trustees of Indiana University, 2013). Pike (2006) developed focused measures of student engagement using the existing questions on the NSSE to address what he framed as a problem in the "lack of usage of survey and assessment data when institutions make decisions" (pg 3).

Much of the previous research regarding the NSSE has been on the study of current student behavior. The NSSE however, provides student engagement data that could be used in longitudinal research to better understand the long-term affect of postsecondary institutions. 2004 was the first administration of the NSSE at this

institution, and until recently, has been limited in usage for longitudinal research. However with the 2004 graduates approaching ten years removed from the institution, for the purposes of this study, the NSSE can provide ample detail for student engagement metrics for comparison to current alumni giving. Specific explanation of the variables used in this study and the items selected will be found in more detail in Chapter Three. Student engagement only provides a portion of the completed picture, there are also alumni activity behavior that could impact one's inclination to donate.

Alumni Behavior

In addition to the research focus on both student and alumni experiences in previous sections of this chapter, Willemain, Goyal, Van Deven, and Thukral, (1994) employed a linear regression to examine the effects of predictor variables, including alumni behavior at a reunion event (reported by the alumnus as either a pleasant experience or unpleasant experience), graduation year, and how many years since graduation, on the outcome variable of the dollar amount of individual alumni giving. This model demonstrated that alumni who had a pleasant experience as an alumni, significantly contributed to a higher giving level.

Based on the theoretical work of Weerts (2007) designing programs that align with public interest or volunteer opportunities that allow alumni to engage in positive experiences would contribute to pleasant, memorable experiences. Weerts and Ronca (2009) investigated the differences between donors and non-donors, and found donors were more likely to stay connected to the institution via alumni newsletters than alumni non-donors. The more informed on the current events of the institution as an alumnus, the

greater an individual felt responsible and connected to the institution, ultimately making a gift.

These results of creating directed opportunities and informing alumni on possible engagement opportunities can assist fundraisers and administrators to focus on programs that create positive, memorable experiences and what, if any, programs have room for improvement.

Current Acquisition Tactics of Potential Donors

Reeher (2013) examined the success rate of acquiring new donors in institutions of comparable size and scope of the current institution in this study. While both email and mail have an abysmal acquisition success rate between 1% to 4%, the telefund method has a much better acquisition success rate of 18% to 20% which has held current for the past two decades (Reeher, 2013).

The telefund is far less limited in its messaging and potential for acquisition since it is more dynamic and allows for a conversation between the potential donor and the institution. As Holloway (2013) articulated “the telephone allows fundraisers to have a real two-way conversation with donors—a truly interactive experience that is difficult to replicate through a computer screen, mobile phone or tablet” (pg 32).

Research on the effectiveness of direct outreach to potential donors via postsecondary institutions utilizing the telefund is limited in academic journals. For-profit telemarketing and sales literature is the focus of most of research on utilizing call centers. While there are some articles (Warwick 2001, Diamond and Gooding-Williams, 2002), on the direct mail and marketing efforts of solicitation that provide information on how to

best arrange stories of need for institutions, there is limited transferable knowledge that can be directly applied to the telefund at a postsecondary institution.

Grace (2000) and Kottasz (2004) both reported young individuals are interested in seeing more immediate results from giving and are focused on the solutions to social problems. This focus on results and solutions from younger generations is not surprising given the work of Braus (1994) in which baby boomers and women increasingly desired more precise explanations and accountability of how their gifts would be used. These individuals are now to an age in which their children are the young alumni of today's institutions. When attempting to acquire these young alumni as donors, the telefund might be able to address these concerns in an open dialogue, in a manner than an email or letter could not. Drozdowski (2008) also recommends that a focused approach on the donor's ability to make a gift and see a return in the investment via a solution to a problem should be used. This sentiment is congruent with a recent release from the Development Alumni Relations Report (2007) indicating that donors have an interest in the returns and value of their donations, instead of receiving tchotchkes. The motivations of donors are changing and the approach used with donors will need to change.

By focusing the conversation on the donor's desire instead of simply the need of the institution, a directed conversation can be attained. Nichols (2004) further articulates the need for increasing individualization of solicitations with targeted attention toward the donor, cautioning this is required for organizations to be successful in future fundraising efforts.

Non-profits and institution of postsecondary education will always have to be in a state of change and be adapting to economic trends. The next dot com, housing bubble, or

new technology bubble is continually on the horizon. In a 1995 article, Peltier and Schibrowsky warned of rising costs will make it more expensive to communicate with potential donors and that negative opinions of spam mail and pushy telemarketing campaigns will make acquisition tougher. Peltier and Schibrowsky (1995) also foretold of increasing state and federal regulations along with increased accountability from donors, that fundraising will have to develop marketing techniques based on analytics and sound data. It is clear at present day, even with our robust technology and ability to connect to individuals across the globe, that now more than ever, institutions will need to develop robust and sophisticated analyses to target and focus their donor-centric strategy.

Methods

Purpose

As found in the pilot study (Rau & Erwin, 2014) the NSSE scales provided a satisfactory foundation for a predictive model of alumni donations, along with institutional data such as number of invites received by an alumnus. This study focuses on predicting alumni donors to postsecondary education institutions by developing a predictive model based on student engagement and alumni behavior. Further, this study seeks to utilize the predictive model and test with an experimental design the acquisition tactics of those identified potential donors through differential scripting during a telefund direct outreach fundraising effort.

Hypotheses

This study examines five hypotheses:

H1: Engagement in student activities and alumni activities has a direct effect on alumni donation rates

H2: Higher rates of engagement in student activities and alumni activities will be less indicative of an avoiding behavior per the avoidance scale than lower rates of engagement in student activities and alumni activities

H3: The predicted to donate group will yield higher rates of pledging or giving, than the not predicted to donate group, upon solicitation

H4: The matched script group will yield higher rates of pledging or giving, than the non-matched script group

H5: The student engagement, alumni activity, and type of script used in calling will yield an interaction that will affect donation rates.

Participants

For this study, participants are seniors from 2004, seniors and juniors from 2005, and seniors and juniors from 2008 who completed the National Survey of Student Engagement (NSSE) and graduated from the institution. The NSSE was sent to a random sample of seniors during each year it was administered, which allows for increased generalizability. In total there are 2739 participants, see Table 3.1 for a breakdown of participants per class.

Table 3.1

Participants per class

Class/Year	2004	2005	2008	Total
Seniors	396	591	721	1708
Juniors		41	990	1031
Total	396	632	1711	2739

Instruments

National Survey of Student Engagement

The National Survey of Student Engagement has been administered to over 1500 institutions as a way of measuring how students spend their time during college and the influence of the institution on those choices. The questionnaire of the NSSE asks students to self-report their participation in a variety of activities from interactions to with peers and faculty, to academic challenge, to time spent studying.

There are multiple categories of NSSE scales used in past research (The Trustees of Indiana University, 2013, Rau and Erwin, 2014), including (1) Satisfaction and Gain scales, (2) Deep Approaches to Learning subscales, and (3) Pike's (2006) Scaletts. The Satisfaction and Gain scales are five different scales that each measure a different component of the college experience; Overall Satisfaction, and Overall Satisfaction plus Quality of Campus Relationships (STqrc), Gains in Personal and Social Development (GNPSO), Gains in Practical Competence, and Gains in General Education.

The Deep Approaches to Learning scales seek to measure the academic behaviors of students, ranging from how often students believe they apply theories to problems, or how long an assignment that required a combining a diversity of information took to complete.

Pike's Scaletts have eleven specific subscales, each explore an area of student engagement and behavior; in-class interactions, environmental support, and out-of-class interactions with educational experiences (The Trustees of Indiana University, 2013). Pike (2006) developed focused measures of student engagement to address what he framed as a problem in the "lack of usage of survey and assessment data when institutions make decisions" (pg. 3). Pike's Scaletts were developed to combat this issue, by providing more focus in the scaletts in order to encourage researchers and institutions to continue to use the NSSE to measure extracurricular activities of students.

For this study, the following selected subscales of the NSSE included: STqrc (Overall Satisfaction and Quality of Campus Relationships), GPNSO (Gains in Personal and Social Development, and Pike's (2006) Varied Experiences scalet. See Appendix 1 for all scales listed above and corresponding items. These subscales and scaletts of the

NSSE allow for the study of specific data regarding engagement activities and attitudes of the students. These variables are the student predictor variables of the predictive model. The student engagement subscales and Pike's Varied Experiences scalelets are now described.

The STqrc scale of the NSSE is the mean of the following items on the NSSE: entirexp, samecoll, advise, envstu, envfac, and envadm – given the individual student completed at least four of the six items. These items each come from individual questions on the NSSE. The mean of these six items of the STqrc scale addresses the student's attitudes and relationships with the institutional environment.

The GPNSO scale is the mean of the following seven items, when the individual student has completed at least four of the items; gnethicsh, gnselfh, gndiversh, gncitiznh, gninqh, gncommunh, and gnspirith. This scale combines measures of a student's personal development while at the institution.

Pike's scalelet of Varied Experiences is the mean of these items when the student completed at least six of the eight total items: intern, volunter, forlang, studyabr, indstudy, seniorx, learncom, cocurr01h, and enveventh. This scalelet combines items referring to the student engagement that is commonly found within divisions of Student Affairs at most institutions.

Alumni/Institutional Data

The institution's alumni database was queried to gather alumni activity data on all the participants. Any alumni not found in the database was be removed from further study. The individual's number of invitations to an alumni event, attendance of alumni events, and whether or not they are a current, past, or never donor were all collected.

The ratio of invitations to participation in alumni events are one of the items used to categorize individuals into calling segments. The giving history of the alumni is used as the outcome variable for the predictive model. Given the low overall alumni donation rate (7%) of this institution, any gift will count as participation and be used.

Procedures

The predictive model was built by combining the variables of the NSSE and the alumni behavior and attitudes data. The multivariate functions are calculated using the Class of 2004 and cross-validated on the subsequent classes. The discriminant analysis model generates a classification table assigning participants in either the non-donor or donor predicted group. The participants are then actively solicited from trained callers in the telefund fundraising center of the institution.

Selected test population

Since the focus of this study is on acquisition of alumni donors, the following cases of individuals are exempted from the calling portion of the study:

- Non-active entities: generally, these are individuals who are deceased or the institution has lost all contact information such as, phone, email, and physical address.
- Do-Not Call: Alumni who have previously indicated to the institution that they do not want to receive phone call solicitations from the institution.
- Current Pledge: If someone has recently made a pledge, their actual giving history will not change to a gift until the pledge is paid, so this study will treat a previous pledge as a gift and remove those individuals.

- Current Employees: The institution is currently in the middle of a eight week Employee Giving Campaign and employees are receiving extra attention and solicitations that are above and beyond what non-employee acquisition groups would receive.

Differential Scripting

There will be two main types of scripts tested by the student callers, a matched script and a non-matched script. All scripts can be found in Appendix 2, and are described in this chapter. The term “matched” in this study refers to the script being matched and personalized to the prospect’s student engagement information and alumni activity information. A non-matched script however, is a general non-specific to the donor that is the traditional acquisition script used by callers in acquisition efforts. The general approach used by this institution in acquiring new donors is to update the prospect about the needs of the institution while also updating prospect contact information. The solicitation ask of the prospect began with the caller asking about how the alumnus thought the future of institution might look, and then to make a donation to the general institution fund. For these categories, the caller has the basic information from the alumni database – Name, address, children, graduation year and major. This non-matched script is used across all calling segments of the predictive model.

In contrast, the matched type of scripting has specific questions and talking points for the callers based on the specific engagement of the alumnus. The caller will also have updated information on the specific college of the alumnus. The focus of the conversation will be on the student and alumni experience and the ask will be based on the specific engagement of the individual. If the participant is identified as ranking high in student

engagement and alumni activity the caller will talk about both student engagement programs and involvement as an alumni, such as the JMU Alumni Association Chapter nearest to the prospect. Should the participant be low in student engagement but high in alumni activity, or visa versa, the conversation will be mainly focused on the dominant experience, which is thought to have a greater aptitude in making a connection to the present. If the participant is low in both student engagement and alumni activity, the script will focus on how the institution is looking to improve both student engagement programs and activities related to alumni.

In this study, the alumnus will be encouraged to make a donation that specifically involves in something the alumnus values, so the donation has more of a personal investment to the alumnus.

The order of calling is extremely important to this study. The non-matched script calling pools will be called first and exhausted, then the callers will proceed to the scripts focusing on the matched calling pools. To maintain the integrity of the experimental design, it is critical the callers not call the matched script calling pools before the non-matched script calling pools, because then the callers will be tempted to begin to borrow components of the matched script. The callers will be instructed that the scripting used in the call center is going to be tested for overall success.

Data Analysis

This section describes the operational definitions of the student engagement and alumni activity variables, types of phone scripts used for calling segments, specific procedures of utilizing the predictive model for donor acquisition in specific fundraising calling segments, and the outcomes from each calling segment. A discriminant analysis was conducted to determine if student engagement and alumni activity predicts whether or not an individual will donate or not to their alma mater. Analysis of variance was then conducted to determine if utilizing student engagement data and alumni activity data to create two different phone script types differed in whether or not an individual made a donation. Not all participants were reached after eight attempts and an analysis of variance was conducted to determine if student engagement and alumni activity differed between those who avoided the phone call and those who answered the phone call. Of particular focus was possible interactions among student engagement, alumni activity, and type of script.

Participant data

The NSSE variables of STqrc, GNSPO, VariedExp, and the number of invites served as the predictor variables in the discriminant analysis to predict non-donors and donors of the each class. These variables combine in the discriminant analysis to form a predictive model of donors. The NSSE variables align with student engagement items (for a full item list see Appendix A) that are central to student affairs and university professionals, while the number of invites is a record of attends events sponsored by a university fundraising office. Descriptives for the samples of participants are found in Table 4.1.

Table 4.1

Descriptive Statistics for NSSE scales and Invitations

NSSE Scale	Mean	Standard Deviation	Minimum	Maximum
STqrc (Satisfaction and Quality of Campus Relationships)	75.25	15.95	11.11	100
GNSPO (Gains in Social and Personal Development)	56.18	23.51	0	100
VariedExp (Varied campus experiences)	43.45	19.02	0	100
Invitations to events	.94	.83	0	8

Note: n=1068, Zeros are true zeros, participants with missing data were excluded

In order to utilize a discriminant analysis to classify individual participants as either a non-donor or donor, an initial calibration sample was created from the Class of 2004 Seniors. This first sample, originally contained 368 self-reported seniors; however, three were excluded because they were not found in the alumni database. Seven individuals were excluded from the sample as they had missing scores for one of the three predictor variables. The 358 remaining individuals served as the calibration sample for the discriminant analysis. For the prior probabilities of the Non-Donor and Donor classification group, the “Size” (i.e. sample size) estimation was chosen for this study, in favor of the “Equal” estimation. The equal estimation gives each classification an equal chance of being the correct outcome. At this institution, the majority of alumni do not donate back to the institution, therefore estimation from the size of the sample was selected as most appropriate.

Table 4.2 illustrates the classification of each participant in the calibration sample, in which 275 of the predicted non-donors did not donate ten years post-graduation, and 11 of the predicted donors did donate within the same time period. The overall correct classification rate of non-donors was 79.9% ($275+11=286$, $286/358=79.9\%$). By using the Hair et al (1995) equation to calculate chance accuracy, $[(282/358)^2 + (76/358)^2] = 66.54\%$ would be a likely percentage based on chance.

Table 4.2

Calibration Sample Seniors 2004

Actual Group Membership	Predicted Group Membership		
	Non-Donor n (%)	Donor Group n (%)	Total n (%)
Non-donor	275 (97.5)	7 (2.5)	282 (100.0)
Donor	65 (85.5)	11 (14.5)	76 (100.0)
Total	340 (94.9)	18 (5.1)	358 (100.0)

Note: 79.9% of original grouped cases are correctly classified.

An initial calibration sample with a 79.9% correct classification is encouraging, and based on this, a second sample was created by combining the class groups of the 2005 seniors, 2005 Juniors, 2008 Seniors, and 2008 Juniors to be used as the cross-validation sample containing 1588 participants. Table 4.3 illustrates the classification of each participant within the cross-validation sample, in which 1126 predicted non-donors actually did not donate post-graduation and 88 predicted donors donated post-graduation. The overall correct classification rate in the cross-validation sample of non-donor and

donors was 76.4% ($1126+88=1204$. $1204/1588=76.4\%$). Utilizing the Hair et al (1995) equation to calculate chance accuracy, $[(1158/1588)^2 + (430/1588)^2] = 60.50\%$ would be a likely percentage based on chance.

Table 4.3

Cross Validation Sample

	Actual Group Membership		Predicted Group Membership	
	Non-Donor n (%)	Donor Group n (%)	Donor Group n (%)	Total n (%)
Non-donor	1126(97.2)	32 (2.8)	1158 (100.0)	
Donor	342 (79.5)	88 (20.5)	430 (100.0)	
Total	1468 (92.4%)	120 (7.5%)	1588 (100%)	

Note: 76.4% of cases are correctly classified.

Both the Calibration sample and the cross-validation sample predicted at higher than chance rates whether a participant was classified as a donor or non-donor based on the predictor variables of the NSSE. Since student engagement predicts well in the discriminant analysis, this provides support for further testing of the model through calling segments based on student engagement variables.

Exclusion of participants from the calling segments

In the initial collection of the data, 1582 participants with prior student engagement information had not made a gift to the university and were targeted for this study. Several exclusions were then applied to this data set of 1582. Three participants were found in the database to have been deceased or lost without contact; 436 participants had previously been asked to be on the Do-Not Call list, 17 participants are

current university employees, two participants are spouses of current university employees, and 15 participants have a current pledge. A final exclusion of non-donor Marketing majors were excluded due to a separate university initiative in which these individuals were being specifically marketed to, for a total of 1068 participants.

Classification of calling segments

To create calling pools for the testing of the model, each participant's actual giving is compared to the predicted classification for the participation. The area of focus of this study is acquisition of new donors, and thus any participant who has not given will be eligible to be called.

The groups of interest for acquisition are those with high student involvement or those with high alumni involvement. It is expected these individuals will be more apt to donate. Some individuals are expected to be high in both student and alumni involvement, while others may only be high in only one.

Undergraduate engagement variable

To determine the classification of high or low student engagement, the VariedExp variable was used. This variable was not only a part of the predictive model but also serves as a metric for the common student involvement type of items – participating in clubs, study abroad, externships, etc (for a full list of the items found in the VariedExp variable see Appendix 1). To determine a suitable cut off point, for high and low student engagement calling segments, the upper quartile was selected.

For the VariedExp variable, the upper quartile began at 51, thus scores of 51 and higher were selected as the high student engagement calling segments. Scores lower than

51 were designated as low and those participants were assigned to the low student engagement calling segments.

Alumni Involvement and Activity variable

To better gauge the alumni involvement, a ratio of events participated to events invited was created. While just the number of invites to events were used in the predictive model, the ratio of invites to participation is an indication of not only what the university has done to engage alumni but also how responsive the individual alumnus is to continued alumni engagement.

No score indicates that the participant has not been invited to an event, and has not attended; while no indication can be made from this score, these individuals are classified as low alumni engagement. A score of zero in this ratio indicates that while invited to an event, the participant has yet to participate. A score between .01 and .99 indicates the participant has participated in at least one event, but not all events invited to. A score of 1 indicates each invitation the participant received they attended. A score of above 1 indicates even further involvement and a greater connection to other alumni as these participants attended not only events they were invited to, but came as guests of those who were invited.

There were 780 participants with a ratio indicating they had each had been invited to one event, while 288 participants had not been invited to any events. Of the 780 participants the range was 0 to 4.00 with a mean of .16 and a standard deviation of .42. To determine whether the participant would be in the high or low alumni group the upper quartile of began at .50, and those with scores higher were then placed in the high alumni group. Scores of participants that were lower than .50 and participants with no ratio score

were placed in the low alumni activity group. The upper quartile was used as a cutoff to ensure the highest ratios of alumni activity were in the high alumni activity group. Table 4.4 illustrates the descriptives of the ratio of invitations to participations.

Table 4.4

Ratio of alumni activity

Variable	Mean	Standard Deviation	Minimum	Maximum
Ratio	.16	.42	0	4.00

Note: n = 780

Assignment to Calling Segments

The cutoff scores based on student engagement and alumni activity were used to segment the total participant populations into one of the four types of calling segments, then a random number generator was used (excel =randbetween (lowest id to highest id)) to select id numbers of participants to be placed in the non-matched script group (for a full description of scripts and groups see Chapter 3 and Appendix 2). Table 4.5 shows the distribution of each participant by student engagement and alumni activity, with script types shown below.

Table 4.5

Distribution of Student Engagement and Alumni Activity by Script Type

	High Alumni Activity		Low Alumni Activity	
	Matched Script	Non-Matched Script	Matched Script	Non-Matched Script
High Student Engagement	27	28	131	131
Low Student Engagement	34	36	341	340

This distribution of participants created four calling segments; (1) High Student-High Alumni, 55 participants high in both student engagement and alumni activity, (2) High Student – Low Alumni, 262 participants high in student engagement, but low in alumni activity, (3) Low Student – High Alumni, 70 participants with low student engagement, but high alumni activity, and (4) Low Student – Low Alumni, 681 participants with both low student engagement and alumni activity.

Calling sequence

A select group of callers were chosen to call the experimental groups. The callers were chosen based on their average performance for fundraising throughout the academic year. The aim was to select mid-range or “average” callers who were not top performers, but not the lowest performers either, in order to generalize results. The callers were selected and given specific instructions when calling: follow the scripts (see Appendix 2 for each script group) specifically and to focus on creating dialogue based on the assigned

scripts for each group. The callers were offered specific incentives for completion of shifts, and pulled out of the normal rotation of calling segments so the only focus was these experimental calling segments. The callers were also told that each of the calling segments were acquisition based, and there was a potential for a lower dollar amount of gifts and potentially a lower rate of gifts overall, but that participation in this set of calling would not harm their performance or end of semester evaluation statistics. Each caller was then given the option to not participate if they were not comfortable with the terms of the calling segments.

Upon agreeing to the terms of these experimental acquisition pools, calling began with the segment of those in the first script group the general script. All four of the general script segments were combined so that callers would not know what to expect, and to encourage following the script. Once that group was completed, the callers began calling the High Student/High Alumni group, followed by the High Student/Low Alumni group, Low Student/High Alumni, and completing the calling with the Low Student/Low Alumni group.

Potential Outcomes of Calling

The potential outcomes from a calling segment can be classified in both a financial and non-financial manner. The financial outcome of a calling segment can be defined as the whether or not an immediate gift was made or the prospect made a pledge to give at a later time. Further, by utilizing a scale of outcomes can be more accurate in describing the effectiveness of a solicitation. Instead of simply a binary, donation or no donation, more detail on the range of donor specific outcomes can be captured.

The attitude of the prospect during the phone call is an important consideration, as when soliciting funds there are many more declines to donate than acceptances; for if a decline is met with a positive attitude or specific reason for declining, this reason might provide a list of those individuals for whom to continue to solicit. Similarly, those individuals with specific negative attitudes or outright declinations may be useful in identifying subsets of the population of potential donors to avoid in the future. The scale of telefund effectiveness is shown in Table 4.6:

Table 4.6

Effectiveness scale of telefund solicitations

Weighted Score	Type of Outcome
10	Credit Card donation
9	Pledge and fulfillment w/in 30 days
8	No pledge but a donation w/in 30 days
6	Pledge but non-fulfillment after 30 days
5	No pledge but call back in [defined] time or request for information
4	No pledge: specific reason for no donation
2	No pledge: no reason or negative reason
1	Do Not Call – remove from future solicitations

The non-financial outcome of a telefund solicitation is if the prospect was contacted or if the number was wrong or disconnected. The information gained from the non-financial result can serve as a proxy for whether or not the individual prospect is avoiding the university's solicitations. If the phone number is called over the span of two

weeks and each time results in an answering machine, it can be inferred that the prospect is avoiding the phone call. If the result of the call is the prospect's parent's phone number, it indicates the individual has not updated their personal information with the university, which may be indicative of the individual wishing to avoid the university. A quick hang up upon the caller introducing themselves is indicative of avoiding a solicitation, but is not as negative against future solicitations as much as those who ask to not be called again. Understanding the concept of avoiding a solicitation may provide further insight to solicitation tactics and methods.

To capture a sense of the non-financial outcome of the solicitation, the callers were instructed to indicate the non-financial outcomes as seen in Table 4.7. If the prospect was currently living out of the country (common among alumni who are serving in the military), the number was the prospects parents' phone number, or if the number was simply incorrect; as noted by either an answering machine that did not correspond to the prospect's name or answered by an individual who said the prospect does not live there. Any calls in which the number being called resulted in a quick hang up within or shortly after the caller introduced his/herself was deemed to be a hang up and recorded by the caller as such.

Table 4.7

Non-financial outcome of calling

Code	Non-financial outcome
1	Contact
2	Parents' Number
3	Answering Machine
4	Out of Country
5	Hang Up
6	Do Not Call
7	Not current prospect phone number

The designated group of callers called each of 1068 participants in this study over the course of two weeks. The callers were told specifically to engage the prospect according to the scripts presented for each segment, in order to test the significance of a general script outlining the needs of the university versus a script that was tailored to student engagement and alumni activities based on the prospect's history. The callers were not informed that some prospects may have a greater inclination to give, so that there would not be a bias from the callers.

Additional data for research consideration

A query of the Alumni Donor database allowed for collection of the number of previous solicitations and number of publications and updates an individual receives from the university. Comparing the number of previous solicitations to number of gifts may provide insight onto a concept of donor fatigue or solicitation overload. Any indication

that the number of previous solicitations has an effect on whether or not a prospect donates will be of interest in this study. Those individuals who elicit greater avoidance may have a greater number of previous solicitations. Table 4.8 illustrates the descriptive statistics of the solicitations for the participants in the study.

Table 4.8

Descriptive Statistics for Previous Solicitations and Non-solicitations

	Mean	Standard Deviation	Minimum	Maximum
Previous Solicitations	26.42	10.75	0	65
Previous Non-solicitations	61.21	20.59	0	115

Note: n= 1068

Hypotheses

This study examines five hypotheses:

H1: Engagement in student activities and alumni activities has a direct effect on alumni donation rates

H2: Higher rates of engagement in student activities and alumni activities will be less indicative of an avoiding behavior per the avoidance scale than lower rates of engagement in student activities and alumni activities

H3: The predicted to donate group will yield higher rates of pledging or giving, than the not predicted to donate group, upon solicitation

H4: The matched script group will yield higher rates of pledging or giving, than the non-matched script group

H5: The student engagement, alumni activity, and type of script used in calling will yield an interaction that will affect donation rates.

Actual Calling Segment Outcomes

In order to test the hypotheses of this study, within the context of acquiring of new donors, 1068 participants were selected. All 1068 phone numbers were called however, only 146 phone numbers resulted in any contact. The other 922 phone numbers were disconnected, or there was some type of avoidance of the call; continually busy, no response or pick up (after 8 rings the system was set by the researcher to disconnect), or continually an answering machine. For the 146 phone numbers that connected to an actual human, 48 were actually confirmed to be the prospect, while the majority of numbers were actually phone numbers of the parents of the prospect. Table 4.9 shows the entire list of connected numbers.

Table 4.9

Connected phone numbers

Contact with the participant	48
Parents residence	59
Out of the country	3
Hang up shortly after introduction	4
Number not associated with participant	32

n= 146

After the conclusion of the calling segments, 30 days were allowed to pass to allow the prospects time to send back their pledge card via the mail, or go online to make a gift on their pledge. Table 4.10 shows the full distribution of the result of the call after

30 days of the call, in which there are 60 different individuals. While the callers only spoke to 49 individuals, 11 additional participants made a gift or pledge despite not having spoken to a caller, but whose phone number had been attempted. This may have been due to the participant recognizing the institution's area code and phone number on the caller id or missed calls of the telephone and choosing to make a gift or pledge.

Table 4.10

Financial Result of Calling – Post 30 days

Credit Card donation	4
Pledge and fulfillment w/in 30 days	0
No pledge but a donation w/in 30 days	4
Pledge but non-fulfillment after 30 days	11
No pledge but call back in [defined] time or request for information	14
No pledge: specific reason for no donation	16
No pledge: no reason or negative reason	10
Do Not Call – remove from future solicitations	1

Note: n = 60, M = 4.88, SD= 2.132

Interactions and Main Effects of Engagement and Script

This study divided an acquisition calling segment in four different segments based on the prospect's own student engagement and alumni activity. Each of the four segments were randomly divided in half such that half of the participants received a phone call with a script matched to their student engagement and alumni activity, and the other half

received a phone call with a script that was general and was not matched to the individual's experience.

Of the four credit card donations, three of the credit card donation were from the Matched-script group, while only one was the non-matched group. The four No Pledge but donation in 30 days, three of these donations were from the Matched-script group, while only one originated from the non-matched group. There was a total of 11 Pledge but non-fulfillment within 30 days, and nine of these were from participants with the matched script. Initially, this is encouraging regarding the effectiveness of the matched scripts.

Each of the variables, student engagement, alumni activity, or script type could have an affect on the outcome variable CallResult1 (Scale of Telefund Effectiveness) or the variables could be working together in some fashion creating an interaction.

An analysis of variance was conducted to first determine if a three-way interaction was present, and no statistical significance was found $F(1,52)=.75, p=.391$. There were also no two-way statistical interactions found, and no main effects were statistically significant. Table 4.11 shows the means of the outcome variable CallResult1(Scale of Telefund Effectiveness) for each script group by calling segment and while the matched script appears to be trending with a higher mean on the Scale of Telefund Effectiveness, Table 4.12 illustrates the ANOVA for each variable and possible interactions revealing a lack of statistical significance.

Table 4.11

Means Table for Scripts by Calling Segment

	High Student – High Alumni	High Student- Low Alumni	Low Student- High Alumni	Low Student- Low Alumni	Total
Non- matched	4.00	4.71	3.20	5.08	4.58
Matched	4.75	5.44	5.75	4.88	5.12
Total	4.60	5.13	4.33	4.97	4.88

Note: n= 60

Table 4.12

ANOVA Table – For Engagement, Activity, and Scripts

	<i>Df</i>	<i>F</i>	μ^2	<i>p</i>
Student Engagement	1	.93	4.39	.340
Alumni Activity	1	.04	.17	.847
Script Type	1	1.48	7.04	.229
Student x Alumni	1	.02	.07	.900
Student x Script Type	1	.47	2.22	.497
Alumni x Script Type	1	.01	.03	.933
Student x Alumni x Script Type	1	.75	3.55	.391
Error	52			

Note: n= 60

Effects of Student Engagement and Alumni Activity on Donations

After the analyses of variance revealed there was a lack of statistical significance, on the Telefund Effectiveness Scale, this study explored the possibility that the scale was too complex to show differences in the groups. There is still utility in understanding differences in groups when the outcome is modified to two possible outcomes, thus creating a new outcome variable BinaryCallResult in which: 1 indicates a pledge or gift, and 0 indicates there was not a pledge or gift. Table 4.13 shows the mean scores on the

binary outcome variable of BinaryCallResult, for the script type by calling segment.

There appears to be a trend across all calling segments in which the Matched script type is larger than the Non-matched script type.

Table 4.13

Means Table for Scripts by Calling Segment

	High Student- High Alumni	High Student- Low Alumni	Low Student- High Alumni	Low Student- Low Alumni	Total
Non-matched script	0.00	.142	0.00	.230	.153
Matched Script	.500	.444	.500	.411	.441
Total	.400	.312	.222	.333	.316

Note: n= 60

Upon conducting an analysis of variance to determine if there are any interactions or if the trend of the Type of Script is statistically significant (see Table 4.14), it was revealed that no three-way interaction was $F(1,52)=0.01, p=.860$; no two way interactions were found, but the main effect of script type was statistically significant, $F(1,52)=4.75, p=.034$. There were no significant main effects of Student Engagement or Alumni Activity, as shown in Table 4.14.

Table 4.14

ANOVA Table – For Engagement, Activity, and Scripts

	<i>Df</i>	<i>F</i>	μ^2	<i>p</i>
Student Engagement	1	.25	.06	.618
Alumni Activity	1	.01	.00	.935
Script Type	1	4.75	1.05	.034
Student x Alumni	1	.01	.00	.936
Student x Script Type	1	.36	.08	.553
Alumni x Script Type	1	.12	.03	.733
Student x Alumni x Script Type	1	.01	.03	.860
Error	52			

Note: n= 60**Testing the Predicted Classification of the model**

The discriminant analysis used previously in this study, that utilized NSEE variables of STqrc, GNSPO, VariedExp, and alumni information regarding the number of invited alumni events, classified each participant in the predictive model as either a donor or non-donor. While this model predicted non-donors and donor fairly well, 79.2% correct classification in the calibration sample and 76.4% in the cross-validation sample, this study allows to test the effectiveness of the statistical model with actual solicitations.

In terms of donations, on the scale of telefund effectiveness, the predicted to donate group had a mean of 5.29, while the Non-Donor predicted group had a slightly lower mean of 4.76. An analysis of variance was conducted to determine if the difference in group means was significant, however, no significant difference was found, $F(1,58)=.647, p=.425$.

When the two predicted classifications were compared on the revised, binary outcome variable of BinaryCallResult, the means were 0.28 for the Non-donor predicted group and 0.42 for the Donor predicted group. However, an analysis of variance showed no statistical difference between the groups, $F(1,52)=1.04, p=.312$.

Testing the Avoidance of Participants

There are also different attitudes associated with the outcome of the phone call. The individual prospect could be avoiding the call, this would result in the call continually going to an answering machine or ringing more than six times, which is characterized as the most avoiding. The individual may also be avoiding consciously or unconsciously by not having updated their contact information with the university, this would result in either reaching the parents number or another phone number not associated with the participant which would be avoidance, but not as blatant as an answering machine. Future avoidance or annoyance with the university results in either a quick hang up by the prospect or requesting to be on the Do Not Call list, which is not avoiding the call itself, but rather running out of patience or a desire to talk to the university. Contact with the prospect or the prospect being out of the country would both be considered non-avoidance, as the majority of those who are out of the country are

members of the military who are deployed abroad, but whose phone number is considered home.

Table 4.15 shows the scale for each type of avoidance outcome and the frequency for each type of outcome. An answering machine or no contact is coded as one, while contacting the participant and having a conversation is coded as four.

Table 4.15

Avoidance Scale

Scale	Type of Outcome	Frequency
4	Contact	49
3	Quick Hang up or Do Not Call	4
2	Parents Number – Not current	91
1	Answering Machine – No contact	921

By calling segments there appears to be slight differences in the mean scores of Avoidance, as shown in Table 4.16 by the calling segments.

Table 4.16

Descriptive Statistics for the Avoid variable in terms of Calling Segments

	Number of Participants	Mean	Standard Deviation
High Student – High Alumni	55	1.33	.840
High Student – Low Alumni	322	1.24	.666
Low Student – High Alumni	71	1.49	1.067
Low Student – Low Alumni	620	1.24	.633

Note: n=1068

Since the calling segments are created from Student Engagement and Alumni activity, an analysis of variance was conducted to explore any potential interaction or main effects. The analysis of variance as shown in Table 4.17 revealed no statistically significant interaction $F(1,1064)=2.067, p=.151$ between student engagement and alumni activity, and no statistical significance in the main effect of student engagement $F(1,1064)=.71, p=.400$. However, there is a significant difference in alumni activity, $F(1,1064)=7.44, p=0.006$, indicating that those alumni with high levels of alumni activity demonstrated less avoidance behavior per the avoidance scale.

Table 4.17

ANOVA Table – Student Engagement, Alumni Activity on the Avoidance Scale

	<i>Df</i>	<i>F</i>	μ^2	<i>p</i>
Student Engagement	1	.710	.340	.400
Alumni Activity	1	7.441	3.558	.006
Student Engagement x Alumni Activity	1	2.067	.988	.151
Error	1064			

Note: n= 1068

Discussion

The purpose of this study was to better understand the impact of an institution's programs and services for students and alumni on what determines alumni donations to the institution. A secondary purpose was to test if customizing a conversation to a potential donor would improve acquisition rates. While many different models exist (see Chapter 2), this model is unique due to its focus on the specific student engagement metrics and alumni activity of alumni which stem from programs and services the institution provides, and thus could make improvements upon. Other models are focused on predicting donors but often use variables that institutions have little or no influence on, while this study's model seeks to use variable that institutions do have influence over.

The hypothesized relationship between student engagement and alumni involvement on alumni donation rates was only partially supported by this study. The predictive model based on student engagement and alumni involvement factors was not significant in predicting donations. This is somewhat surprising as the literature (McDearmon, 2010; Gaier, 2005; Rissmeyer, 2010; Harrison et al, 1995; Marr et al, 2005) supports that student activities and alumni involvement are positively related to alumni giving. However, The Chronicle of Philanthropy (2005) found that in terms of priority, financially supporting one's alma mater ranks sixth out of nine in giving. Given these participants are young alumni, they may give in the future, but at present with limited income, the institution may not rank as a high enough priority.

Prior high or low student engagement, current alumni high or low engagement, or type of phone script matched to these variables was not associated with the Telefund effectiveness variable. However, there was a significant relationship between the

grouping of student engagement and alumni activity on the outcome measure of avoidance. There is support for the notion that those individuals with lower student engagement and lower alumni activity demonstrate greater propensity to avoid a phone call. This could be an inverse of how engaged alumni want greater connection and personalization concerning their donations, (Drozdowski, 2008; Development Alumni Relations Report, 2007; Nichols, 2004) in that the non-engaged person does not want to have contact or connection with the institution.

This notion of greater connection and personalization was the driving force behind testing the differential scripts. This study found some support for using differential scripts when acquiring new donors, as the differences in script type were significant in terms of donation rates. As hypothesized, the engagement focused matched script did yield higher rates of giving irrespective of student engagement and alumni activity.

Implications

As previously stated, there is a lack of public research concerning the acquisition of new donors. No doubt, institutions using predictive modeling and analytics to predict donors are guarding this work as it is seen as intellectual property and specific to that institution. Unfortunately, this could lead to a lack in strategy for those institutions just starting an analytical approach or those who are young professionals in the field of fundraising.

While this model does not work statistically as well as hoped, it does provide a support for understanding who you are trying to solicit and speaking with those individuals as individuals. A matched script may require more time or understanding of

the potential donor pool, but offer a greater monetary return for the institution. The matched script group yielded 15 pledges and credit card donations, while the non-matched group yielded four pledges and credit card donations. It is important to assemble relevant data to create specific scripts that align with the prospect segment. This can be accomplished with commonly available software such as Excel or SPSS. Even though the operational segments in this study were not statistically significant, the model could still serve as tool for identifying those who might be more inclined. By using this model one could first solicit those who were at least predicted to donate, opposed to those who are not predicted to donate.

By exploring the avoidance outcome of a phone call, it was found that alumni with greater alumni activity were less likely to avoid a phone call from the institution. This finding can be helpful in reducing the number of potential alumni to call, or at least beginning acquisition calling segments with those alumni with the most activity first, then if there is time and resources available, call those with less activity. Utilizing resources to call 300 individuals who might donate may be a better approach than calling 3000 individuals in which nothing is known about their propensity to give.

This study also revealed how important accurate data on alumni is important to any fundraiser looking to use analytics to improve fundraising. With the expanded prevalence of undergraduates with cell phones, institutions may be able to collect up to date cell phone numbers from a student's application for graduation.

Study Limitations

This study only used data from one institution, and other results could be found at different institutions. With NSSE data being widely available at over 2500 campuses, an

additional study could look at giving rates from a macro perspective and combine datasets and giving rates.

Also, the NSSE has a wide selection of items and scales, and this study only used three of those of scales and variables. Student engagement is an ever-growing construct as more institutions continue to expand and develop opportunities for students on campus. This study focused on three that were thought to represent student engagement, but perhaps utilizing other NSSE items would prove to be useful in creating a model. It is possible though, that the NSSE may not be the optimum measure of student engagement as related to potential alumni giving.

A scale of telefund effectiveness was also calculated for this study; however, it was not found to be useful. Perhaps, the components and weights were not valid. Using the simpler outcome of gave or did not give was a better outcome in this study.

This study examined acquisition of new donors with the youngest donor having already 5 years post-graduation to make a gift. Research has shown the importance of getting young alumni to donate sooner rather than later. A future study could obtain a more recent data set from the NSSE and solicit more recent graduates.

However, as the research was being conducted, it became clear that the university does not have updated contact information for many of its alumni, this is especially disconcerting given these alumni are recent graduates. The level of incorrect phone numbers limited the ability to truly test the predictive model as it was intended. More than half of the contacted phone numbers resulted in non-current phone numbers. Since there was a small minority of alumni with accurate contact information, the sample size

was limited. The results may have been different if a larger number of alumni had been reached. There is no replacement for good data when attempting to improve fundraising.

Appendix 1 – NSSE subscales

STqrc scale – Satisfaction and Quality of Campus Relationships scale

- entirexp item – Rated as Poor, Fair, Good, or Excellent
 - How would you evaluate your entire educational experience at this institution
- samecoll item – Rated as Definitely no, Probably no, Probably yes, or Definitely yes
 - If you could start over again, would you go to the same institution you are attending
- advise item - Rated as Poor, Fair, Good, or Excellent
 - Overall, how would you evaluate the quality of academic advising you have received at your institution?
- envstu item – Rated on a 1-7 scale -1=Unfriendly, Unsupportive, Sense of Alienation and 7=Friendly, Supportive, Sense of Belonging
 - Indicate the quality of a student’s relationships with people at the institution, specifically Other Students
- envfac item - Rated on a 1-7 scale, 1=Unavailable, Unhelpful, Unsympathetic, and 7=Available, Helpful, Sympathetic
 - Indicate the quality of a student’s relationships with people at the institution specifically Faculty Members
- envadm item - Rated on a 1-7 scale, 1=Unhelpful, Inconsiderate, Rigid and 7=Helpful, Considerate, Flexible
 - Indicate the quality of their relationships with Administrative Personnel and Offices

GPNSO – Gains in Personal and Social Development Scale

- GPNSO scale – Rated 1=Very little, 2=Some, 3=Quite a bit, 4=Very much
- To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in
 - gnethics item - Developing a personal code of values and ethics
 - gnsself item - Understanding yourself
 - gndivers item - Understanding people of other racial and ethnic backgrounds
 - gncitizen item - Voting in local, state, or national elections
 - gncommun item - Contributing to the welfare of your community
 - gnspirit item - Developing a deepened sense of spirituality

Varied Experiences – Pike’s scalelet

- Rated on a scale of 1=Have not decided 2=Do not plan to do 3=Plan to do 4=Done
- Which of the following have you done or do you plan to do before you graduate from your institution
 - intern item - Practicum, internship, field experience, co-op experience, or clinical assignment
 - volunter item - Community service or volunteer work
 - forlang item - Foreign language coursework
 - studyabr item - Study abroad
 - indstudy item - Independent study or self-designed major

- seniorx item - Culminating senior experience (capstone course, thesis, project, comprehensive exam, etc)
- Rated by the student 1=0 hours 2=1-5 hours 3=6-10 hours 4=11-15 hours 5=16-20 hours 6=21-25 hours 7=26-30 hours 8=More than 30 hours.
- About how many hours do you spend in a typical 7-day week doing each of the following?
 - learncom item - Participate in a learning community or some other formal program where groups of students take two or more classes together.
 - cocurr01 item - Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.)
- Rated by the student 1=Very little 2=Some 3=Quite a bit 4=Very much.
- To what extent does your institution emphasize the following
 - enveventh item - Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)

Appendix 2 – Differential Scripts

Matched Scripts

Calling Script High Student – High Alumni Engagement (ACQA segment)

Good evening! My name is _____ and I am a (class year) at James Madison University. Is _____ available?

How are you this evening? Tonight we are calling graduates from the mid-2000s to update our records and talk to you about your JMU alumni experience. Do you have time to talk?

Update email and mailing address – as JMU alumni association sends updates via both mediums. Thank you for that information.

How was your experience as a JMU student?

Experiences with professors or other student groups that were memorable?

(Share some information about how JMU has helped you as a student)

How has your post-JMU experience been?

Have you attended JMU events as an alumnus?

Do you keep in touch with other alumni through an Alumni chapter?

(Share some information about how JMU has opportunities for alumni to be involved)

Thanks for sharing, the JMU alumni network is growing each year and I can't wait to join the alumni of JMU. It seems like you had a great experience at JMU especially in (repeat back some of the organizations, coursework, or research projects) –currently in the College of _____ or within Student Affairs we have students that are doing _____

In order for these opportunities to continue and for JMU to improve, we really count on support from recent graduates like yourself. Would you consider a gift of \$500 to support the _____ (same organization or major).

If yes, move to Thank You

If no, reiterate the importance of continuing the experience they had and let them know that due to their graduation year a gift of \$500 qualifies them for the President's Council. Explain the benefits of members only emails, events, and information from the President.

If no, what about a monthly recurring of \$25 or a one-time gift of \$250.

If no, ask what amount and any amount helps, and even a small gift can inspire others to give.

- Thank you: IF YES, Thank you again for your generous commitment Mr/Ms_____. As a student, I really appreciate what you are doing and for giving back. Have a great evening and now I need to put one of my managers on the phone to confirm this commitment
- IF NO, Thank you for your time Mr/Ms_____ I hope that you have a great evening.

Calling Script High Student – Low Alumni Engagement (ACQB Segment)

Good evening! My name is _____ and I am a (class year) at James Madison University. Is _____ available?

How are you this evening? Tonight we are calling graduates from the mid-2000s to update our records and talk to you about your JMU experience. Do you have time to talk?

Update email and mailing address – as JMU alumni association sends updates via both mediums. Thank you for that information.

How was your experience as a JMU student?

What about the experience was most memorable to you?

Experiences with professors or other student groups that were memorable?

--I see our employment information on you has you working as ___(position) for _____ (company name). Did your major or projects related to your major help in getting the job?

(Share some information about how JMU has helped you as a student)

Thanks for sharing, it seems like you had a great experience at JMU especially in (repeat back some of the organizations, coursework, or research projects) –currently in the College of _____ or within Student Affairs we have students that are doing _____

In order for these opportunities to continue and for the student experience at JMU to improve, we really count on support from recent graduates like yourself. Would you consider a gift of \$500 to support the _____ (same organization or major).

If yes, move to Thank You and future steps

If no, reiterate the importance of continuing the experience they had and let them know that due to their graduation year a gift of \$500 qualifies them for the President's Council. Explain the benefits of members only emails, events, and information from the President.

If no, what about a monthly recurring of \$25 or a one-time gift \$250.

If no, ask what amount and any amount helps, and even a small gift can inspire others to give.

- Thank you: IF YES, Thank you again for your generous commitment Mr/Ms_____. As a student, I really appreciate what you are doing and for giving back. Have a great evening and now I need to put one of my managers on the phone to confirm this commitment
- IF NO, Thank you for your time Mr/Ms_____ I hope that you have a great evening.

Calling Script High Alumni – Low Student Engagement (ACQC Segment)

Good evening! My name is _____ and I am a (class year) at James Madison University. Is _____ available?

How are you this evening? Tonight we are calling graduates from the mid-2000s to update our records and talk to you about your JMU alumni experience. Do you have time to talk?

Update email and mailing address – as JMU alumni association sends updates via both mediums. Thank you for that information.

How has your post-JMU experience been?

Have you attended JMU events as an alumnus?

Do you keep in touch with other alumni through an Alumni chapter?

(Share some information about how JMU has opportunities for alumni to be involved)

--I see our employment information on you has you working as ____ (position) for _____ (company name). Is that your current employer? Was there anything about the JMU experience that helped prepare you for the position?

Thanks for sharing, the JMU alumni network is growing each year and I can't wait to join the alumni of JMU.

In order for these opportunities to continue and for JMU to improve, we really count on support from recent graduates like yourself. Would you consider a gift of \$500 to support the _____ (same organization or major).

If yes, move to Thank You and future steps

If no, reiterate the importance of continuing the experience they had and let them know that due to their graduation year a gift of \$500 qualifies them for the President's Council. Explain the benefits of members only emails, events, and information from the President.

If no, what about a monthly recurring of \$25 or a one-time gift of \$250.

If no, ask what amount and any amount helps, and even a small gift can inspire others to give.

- Thank you: IF YES, Thank you again for your generous commitment Mr/Ms _____. As a student, I really appreciate what you are doing and for giving back. Have a great evening and now I need to put one of my managers on the phone to confirm this commitment
- IF NO, Thank you for your time Mr/Ms _____. I hope that you have a great evening.

Calling Script Low Student - Low Alumni Engagement (ACQD Segment)

Good evening! My name is _____ and I am a (class year) at James Madison University. Is _____ available?

How are you this evening? Tonight we are calling graduates from the mid-2000s to update our records and share some updates about what is happening at JMU.

Update email and mailing address – as JMU alumni association sends updates via both mediums. Thank you for that information.

How was your experience as a JMU student? As an alumni?

--If the prospect does not have any too positive or very memorable, offer information about how there are engaging activities for both students and alumni taking place in the prospects college. Ask them if those types of activities would be something they would have enjoyed as a student or if they would like more information about JMU alumni activities.

(Share some information about how JMU has helped you as a student)

Continue to mention the idea that JMU is working hard to provide opportunities for both inside the classroom and applying that learning to outside the classroom via internships, student research, etc (connection to the present)

--I see our employment information on you has you working as ____ (position) for _____ (company name). Did your major help in getting the job?

Talk about how JMU is working hard to improve the overall JMU experience from both the student and alumni perspective (connection to the present activities of the prospect's college or Alumni chapter near the prospect's current city)

In order for these opportunities to continue and for JMU to improve, we really count on support from recent graduates like yourself. Would you consider a gift of \$500 to support the _____ (same organization or major).

If yes, move to Thank You and future steps

If no, reiterate the importance of continuing the experience they had and let them know that due to their graduation year a gift of \$500 qualifies them for the President's Council. Explain the benefits of members only emails, events, and information from the President.

If no, what about a monthly recurring of \$25 or a one-time gift of \$250.

If no, ask what amount and any amount helps, and even a small gift can inspire others to give.

- Thank you: IF YES, Thank you again for your generous commitment Mr/Ms_____. As a student, I really appreciate what you are doing and for giving back. Have a great evening and now I need to put one of my managers on the phone to confirm this commitment
- IF NO, Thank you for your time Mr/Ms_____ I hope that you have a great evening.

Non-matched script – will be given to each predicted classification of prospect

INTRODUCTION

- Good Evening, my name is ____ and I am calling from James Madison University. Is ____ available?
- Hello! My name is ____ and I am a (class year) at James Madison University. How are you this evening? Tonight we are calling our young alumni from the 2000s update our records and talk to you about updates at JMU. Do you still live at ____? EMAIL, SPOUSE, EMPLOYMENT, ETC
- Thank you so much for that information.
What did the future look like to you when you came to JMU?
(**be sure to share your view**) We at JMU feel positive about the future and energized by President Alger's new vision.

- The Vision Fund is JMU's fund which supports student scholarships, career and academic support, and daily operation of the University. If you give a gift, you are helping to support the new vision of JMU. Support like yours is so important for JMU because it can help increase our national rankings, which ultimately increases the value of your degree!

ASK #1: \$ 500

- We have a variety of giving levels at the JMU. In order to give our current students and faculty greater opportunities, would you consider giving a gift of \$500 to the Madison Fund?

IF NO, ASK #2: \$250

- Empathize with reason for NO.
- As I have already mentioned, annual giving is so important and currently only 7% of our alumni give back to JMU, which is far lower than our peer institutions like George Mason and Radford. This is why your participation is so vital.
- Do you think a gift of \$25 monthly or \$250 would be a gift you would consider this evening?

IF NO, ASK # 3: Participation

- Empathize with reason for NO. Ask what amount and any amount helps, and even a small gift can inspire others to give.

IF NO, GO TO ENDING CALL

ENDING CALL

- IF YES, Thank you again for your generous commitment Mr/Ms _____. As a student, I really appreciate what you are doing and for being the change we see and need here at JMU. I hope you will come back to campus sometime soon. Have a great evening and now I need to put one of my managers on the phone to confirm this commitment
- IF NO, Thank you for your time Mr/Ms _____. I hope that you have a great evening and will come back to campus sometime soon!

References

- Braus, P. (1994). Will baby boomers give generously. *American Demographics*, 16(7), 48–52.
- Becker, W.E. and Lewis, D.R. (1992), *The Economics of American Higher Education*, Kluwer Academic Publishers, Boston.
- Clotfelter, C. T. (1997). The economics of giving. In J. W. Barry & B. V. Manno (Eds.), *Giving better, giving smarter* (pp. 31–55), Washington, DC: National Commission on Philanthropy and Civic Renewal.
- Clotfelter, C.T. (2002) Alumni giving to elite private colleges and universities. *Economics of Education Review*, 22, 109-120.
- Cunningham B.M. & Cochi-Ficano C.K. (2002). The determinants of donative revenue flows from alumni of higher education: an empirical inquiry. *The Journal of Human Resources*, 37(3), 540-569.
- Diamond, W.D. & Gooding-Williams, S. (2002). Using advertising constructs and methods to understand direct mail fundraising appeal. *Nonprofit Management & Leadership*, 12(3), 225-242.
- Drezner, N.D. (2011). Philanthropy and fundraising in American higher education. *ASHE Higher Education Report*, 37(2), 65-70.
- Drozdowski, M.J. (2008). Why it's important for all fund-raising campaigns to follow the lead of the big ones and stress results, not need. *Chronicle of Higher Education*, 54(42), S4.
- Duderstadt, J.J. and Womack, F.W. (2003), *Beyond the Crossroads: The Future of the Public University in America*, Johns Hopkins University Press, Baltimore, MD.

- Gaier, S. (2005) .Alumni satisfaction with their undergraduate academic experience and the impact on alumni giving and participation *International Journal of Educational Advancement* 5 (4) : 279 – 288 .
- Grace, K. S. (2000) ‘High Impact Philanthropy’, John Wiley and Sons, New York.
- Hair, J. F., Jr., Anderson, R. E., Tatham, R. L. and Black, W. C. (1995) *Multivariate Data Analysis*, 3rd ed, Macmillan Publishing Company, New York.
- Harrison, W.B., Mitchell, S.K. and Peterson, S.P. (1995). Alumni donations and colleges’ development expenditures: does spending matter? *The American Journal of Economics and Sociology* 54: 397–412.
- Holloway, B. (2013). Using the phone to reduce donor attrition and drive loyalty. *International Journal of Nonprofit and Voluntary Sector Marketing*, 18, 31-35.
- Kelleher, L.A. (2011). Alumni participation: an investigation using relationship marketing principles. *UNLV Theses/ Dissertations/Professional Papers/Capstones. Paper 977.*
- Kottasz, R (2004). How should charitable organisations motivate young professionals to give philanthropically? *International Journal of Nonprofit and Voluntary Sector Marketing*. 9(1), 9-27.
- Lindahl, W.E. & Winship, C. (1992). Predictive models for annual fundraising and major gift fundraising. *Nonprofit Management and Leadership*, 3(1), 43-64.
- Liu, Y. (2006). Determinants of private giving to public colleges and universities. *International Journal of Educational Advancement* 6(2), 119-140.
- LRP Publications (2007). Tapping new donors requires new techniques. *Development and Alumni Relations Report* 9(12), 7.

- Mael F. & Ashforth B.E. (1992). Alumni and their alma mater: a partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103-123.
- Marr, K.A., Mullin, C.H., and Siegfried, J.J. (2005). Undergraduate financial aid and subsequent alumni giving behavior. *The Quarterly Review of Economics and Finance*, 45, 123-143.
- McDearmon, J.T. (2010). What's in it for me: a qualitative look into the mindset of young alumni non-donors. *International Journal of Educational Advancement* 10, 33-47.
- Meer, J. & Rosen, H.S. (2012). Does generosity beget generosity? Alumni giving and undergraduate financial aid. *Economics of Education Review*, 31, 890-907.
- Mesch, D. J., Rooney, P. M., Steinberg, K. S., & Denton, B. (2006). The effect of race, gender, and marital status on giving and volunteering in Indiana. *Nonprofit and Voluntary Sector Quarterly*, 35(4), 565–587.
- Nichols, J.E. (2004). Repositioning fundraising in the 21st century. *International Journal of Nonprofit and Voluntary Sector Marketing*, 9(2), 163-170.
- Peltier, J.W. & Schibrowski, J.A. (1995). The direct marketing of charitable causes: A study of U.S. fundraisers. *Journal of Direct Marketing*, 9(3), 72-80.
- Pike, G.R. (2006). The dependability of NSSE scalelets for college- and department-level assessment. *Research in Higher Education*, 47(2), 177- 195.
- Rau, N.E. & Erwin, T.D. (2014). Using student engagement to predict alumni donors – an analytical model. *Journal of Nonprofit Education and Leadership* (in press).

- Reeher, LLC. (2013). Annual giving channel analysis: a scientific approach to planning and evaluating your performance. Saint Paul, MN.
- Rissmeyer, R.A. (2010). Student affairs and alumni relations. *New Directions for Student Services* (130)19-29.
- Sargeant, A., Ford, J.B., & West, D.C. (2006). Perceptual determinants of nonprofit giving behavior. *Journal of Business Research* 59, 155-165.
- Sun, X., Hoffman, S.C., & Grady, M.L. (2007). A multivariate causal model of alumni giving: implications for alumni fundraisers. *International Journal of Educational Advancement* 7(4), 307-332.
- Schervish, P. G. (1997). Inclination, obligation, and association: What we know and what we need to learn about donor motivation. In D. F. Burlingame (Ed.), *Critical issues in fund raising* (pp. 110– 138). New York: John Wiley & Sons.
- State Council of Higher Education for Virginia. Reports: Student Debt June 19, 2014. Retrieved from: http://research.schev.edu/studentdebt/DebtProfile_SL001T.asp
- Stevick, T.R. (2010). Integrating development, alumni relations, and marketing for fundraising success. *New Directions for Higher Education*, 149, 57-64.
- The Chronicle of Philanthropy (2005) 1 September 2005. Report on Giving.
- The College Board Average Rates of Growth of Published Charges by Decade. Retrieved January 7, 2014 from <http://trends.collegeboard.org/college-pricing/figures-tables/average-rates-growth-tuition-and-fees-over-time#Key Points>
- The Trustees of Indiana University (2013). About NSSE. Retrieved October 27, 2013 from <http://nsse.iub.edu/html/about.cfm>

- The Trustees of Indiana University (2013). Computing scales and scalelets, original NSSE (2004-2012). Retrieved October 27, 2013 from http://nsse.iub.edu/html/creatingScalesScalelets_original.cfm .
- Temporal, P. & Trott, M. (2001). *Romancing the customer: Maximizing brand value through powerful relationship management*. Singapore: John Wiley & Sons.
- Wang, L. & Graddy, E. (2008). Social capital, volunteering, and charitable giving. *Voluntas*, *19*, 23-42.
- Warwick, M. (2001). *How to write successful fundraising letters*. San Francisco: Jossey-Bass.
- Wastyn, M.L. (2009). Why alumni don't give: a qualitative study of what motivates non-donors to higher education. *International Journal of Educational Advancement*, *9*(2), 96-108.
- Weerts, D. J. (2007). Toward an engagement model of institutional advancement at public colleges and universities. *International Journal of Educational Advancement*, *2007*, *7*, 79
- Weerts, D. J., and Ronca, J. M. (2006). Examining differences in state support for higher education: a comparative study of state appropriations for research universities. *Journal of Higher Education*, *77*(6), 935–965.–103.
- Willemain, T.R., Goyal, A., Van Deven, M., and Thukral, I.S. (1994) Alumni giving: the influences of reunion, class, and year. *Research in Higher Education* *35*(5): 609–629.