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Engaging Alumni to Increase Charitable Donations to their University

CAPSTONE REPORT

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Abstract

State funding in higher education remains lower than before the effects of the last recession, while education costs have risen. Higher education uses fundraising to keep the quality of education from diminishing and control tuition. This annotated bibliography presents selected literature on identifying best practices for increasing alumni philanthropic participation through social media.

Keywords: higher education, alumni, nonprofit, social media, engagement, fundraising, analytics

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Introduction to the Annotated Bibliography

Problem

Enrollment in all U.S. institutions of higher education is on the rise. According to the National Center for Education Statistics, during the period from 2002 to 2012, enrollment in degree-granting institutions rose 24% (Nces.ed.gov, 2015). State funding per enrolled student dropped 20% over this time period (National Science Board, 2012). Undergraduate enrollment is projected to increase an additional 16% by 2019 as more individuals pursue a college education. A decline in state funding, coupled with current and projected enrollment increases, can impact institutions' financial health and the quality of education provided (National Science Board, 2012).

In Oregon, state support of higher education for fiscal year 2015 (\$694.4 M) remains 13% lower than state support in fiscal year 2009 (\$791.4 M), even taking into consideration a two year increase of 19.6% from fiscal year 2013 (\$580.7 M) to the present (Carlson, 2015). Reductions in state funding often result in tuition increases (Jessell, 2013). In Oregon, tuition at public higher education institutions has increased 31.5% from 2008-2015 (Mitchell & Leachman, 2015). These public higher education institutions are relying on alternative funding sources, such as philanthropic donations, to supplement state funding to help mitigate the rise in tuition costs (VSE, 2014). As shown in Table 1, fundraising for higher education has grown steadily after the impact of the recession up until fiscal year 2013, when the trend started to decrease (CASE, 2015a).

Table 1								
<i>Annual Higher Education Fundraising Growth</i>								
Fiscal Year	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Fundraising growth	7.2%	-3.9%	4.3%	4.7%	4.9%	6.2%	5.4%	5.1%
(CASE, 2015a)								

According to the results of the Voluntary Support of Education (VSE) survey conducted by the Council for Aid to Education (CAE), a subsidiary of the nonprofit research group the RAND Corporation, in 2014 the funding of student scholarships represented 43.6% of all endowed gifts to universities, while only 8.3% of alumni donated to their universities (VSE, 2014).

Case.org (2015b), a volunteer-led nonprofit organization that serves educational institutions and the advancement professionals who work on their behalf, notes that in the past, universities tended to engage with alumni as a “stand-alone activity divorced from fundraising and other advancement activities” (para. 6). Case.org lists reasons why today alumni relations are an important part of higher education institution advancement fundraising activities, including:

- Alumni are an institution's most loyal supporters.
- Alumni are fundraising prospects.
- Alumni generate invaluable word-of-mouth marketing among their social and professional networks (Case.org, 2015b).

- Alumni generate invaluable word-of-mouth marketing among their social and professional networks (Case.org, 2015b).

The methods and tools of communication that institutes of higher education use to communicate with alumni have changed with the advent of social media (Doak, 2011). As Doak (2011) notes, alumni are no longer passive recipients of their universities' press releases and newsletters. "They are on Facebook, Twitter, LinkedIn, Google+, and any other social media platform that comes to mind" (Doak, 2011). While Sessa (2015) reports that 91% of higher education schools use social media to communicate with alumni, Doak (2011) stresses that "we need to remember that these tools are merely methods of communicating; the goal of this communication is genuine engagement with the people who are important to your institution" (para. 2).

Communicating effectively with alumni to engage them in their university is imperative to increase their participation in philanthropy. Institutions must couple social media engagement with online giving to provide an avenue for more alumni to donate to their universities. "The Internet is becoming an increasingly significant source of giving and of new donor acquisition in particular" (Flannery & Harris, 2011, p. 5). Social media has enabled nonprofits to strategically engage new, larger, and younger audiences in a cost-effective manner (Flannery, Harris, & Rhine, 2009).

Purpose

The purpose of this annotated bibliography is to present selected literature that explores the means universities can use to increase alumni engagement and giving through social media. Sources are presented on the more general topic of how to effectively build

alumni engagement in higher education, as well as the topic of fundraising as it applies to higher education. Literature is presented that addresses the most effective uses of social media in organizations, as well as specific uses of analytics garnered from social media campaigns to mine the data provided through social media campaigns and improve the effectiveness of future social media campaigns.

Research Questions

Main question. As the need for private support of higher education institutions rises due to decreased state support, how can higher education fundraising institutions increase alumni philanthropic participation through social media?

Sub-questions. How can the analytics garnered from social media campaigns be used to improve the effectiveness of future social media campaigns?

Audience

Higher education senior executives (typically president) and senior executives of their foundations are the driving force in championing and governing the type of change examined in this annotated bibliography. The information presented in this annotated bibliography is useful for this stakeholder group to convey the importance of using social media and analytics to reach the next campaign's goal. Therefore, this stakeholder group is the primary audience for this study.

Higher education social media owners (e.g., a university's employee who manages the Twitter account to report information on the university's men's basketball team) ensure their social media campaigns align with the organizational strategy of their university. University

fundraisers communicate with donors and prospective donors. Therefore, these two stakeholder groups are also potential audiences for this study.

Search Report

Search strategy. References to this topic are identified and cataloged using the search tools provided by the UO Libraries. The Google search engine helps identify specific key words for continued searching within the UO Libraries. Google Scholar provides resources and information used in searching for references pertaining to this topic. References listed in the articles under review provide another source of material. The factors for consideration of the preliminary search include:

- Higher education enrollment increases
- Decrease in state support of higher education institutions
- Social media policies in higher education
- Engaging alumni using effective social media marketing
- Using analytics produced by social media marketing campaigns

Key terms. Common key terms, and a combination of them, used to obtain the list of references in this article include:

- Social media
- Higher education
- Tuition increase
- State appropriations
- Engage alumni
- Private funding

- Crowdfunding
- Analytics

The initial query search term, *social media*, produces over 90k results. Adding the keywords *higher education* to the key phrase, making it *social media higher education*, limits the return to just over 4k results. Reviewing the top 20 relevant results, two applicable articles are found. The next query using *social media higher education alumni* produces 79 results, with two of the top 20 relevant articles applicable to this topic. *Social media analytics* produces 617 results, with four of the top 20 relevant articles applicable to this topic.

Throughout the literary review, the main question and sub-questions are starting to take form. This opens up further possibilities for literary review. With a few publications available to members of the Council for Advancement and Support of Education (CASE), the industry-leading association for fundraising professionals, the CASE archives are reviewed. This search returns articles and publications relevant to this topic, specifically regarding the higher education enrollment increases and the decline in state support for higher education institutions.

Search engines and databases. The following search engines and databases provides literature pertaining to this topic:

- Currents (CASE publication archives)
- Academic Search Premier
- JSTOR archive of journals
- UO Library Search
- Google Scholar

Documentation approach. This study relies on a few tools to document and track the resources collected. The standalone version of Zotero is used to capture and save articles. The website www.citethisforme.com is used to assist in formatting the bibliography into APA style. The free version of their service will only store the bibliography for one week, so this service is used as a working document and not a repository of references. Basecamp is used to track progress of research and to maintain the annotated bibliography. The workflows and tracking tools in Basecamp provide organization to the annotated bibliography during research. Microsoft OneNote is used to create notes and to capture portions of articles. Information is stored either online, with proprietary backup systems in place, or on the Oregon State University Foundation's server, where it is backed up on a nightly basis.

Evaluation criteria. The Center for Public Issues Education (n.d.) document entitled Evaluating Information Sources outlines which characteristics to consider when evaluating research sources. This study uses resources that are authoritative, meaning they have been peer-reviewed, cited by other articles, or came from philanthropic associations. The timeliness of literature for this study is important because social media is a relatively new tool; literature is selected that was published in the last five years. The quality of the literature is evaluated; sources are selected that demonstrate accurate grammar, clarity, flow, and structure (Center for Public Issues Education, n.d.). The relevancy of the literature is determined by deep reading; sources that inform the topics of alumni engagement in higher education, fundraising, the use of social media in organizations, and social media analytics are selected. The fifth characteristic, bias, is determined by evaluating whether the author has a goal to sell a related product or

service or is looking to persuade the reader to a particular viewpoint; sources exhibiting bias are not selected for this research study (Center for Public Issues Education, n.d.).

Annotated Bibliography

The following annotated bibliography presents 15 references that explore the identification of best practices for increasing alumni philanthropic participation through social media. References are selected to help higher education senior executives (typically president), senior executives of their foundations, and higher education social media owners determine the value of creating or improving their social media programs and how they can use the analytics garnered from social media campaigns to improve the effectiveness of future social media campaigns. References are presented in four categories: (a) resources focused on reductions in state funding and resulting increases in tuition for higher education, (b) resources focused on alumni engagement and donations, (c) resources focused on the use of social media in organizations, and (d) resources focused on analytics.

Each annotation consists of three elements: (a) the full bibliographic citation, (b) an abstract, and (c) a summary. The summaries present an overview of the importance of creating an effective social media program and of using analytics to improve social media campaigns.

Resources focused on Reductions in State Funding and Resulting Increases in Tuition for Higher Education

Mitchell, M., & Leachman, M. (2015). *Years of cuts threaten to put college out of reach for more students.* Center on Budget and Policy Priorities. Cbpp.org. Retrieved 8 December 2015, from <http://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students>

Abstract. Even as states restore some funding that was cut in recent years, their support for higher education remains well below pre-recession levels, straining college affordability — especially for students whose families struggle to make ends meet. Many public two- and four-year colleges and universities avoided significant tuition increases for the second year in a row, as most states continued to replenish higher education support. Still, 13 states further cut funding in the past year. And in almost all states, higher education support remains below what it was in 2008, at the onset of the Great Recession.

These cuts led to steep tuition increases that threaten to put college out of reach for more students. They also raise concerns about diminishing the quality of education at a time when a highly educated workforce is more crucial than ever to the nation's economic future.

Summary. This article provides information pertaining to state funding for public two- and four-year colleges and universities, tuition increases, and the risk of diminishing the quality of higher education. The authors note that support for higher education remains below the level of support in 2008 in almost all states. The authors report that tuition increases are occurring across the country to compensate for declining state funding and rising costs. Higher education institutions have also resorted to cutting faculty positions, eliminating course offerings, closing campuses, shutting down computer labs, and reducing other services such as library services. The article provides charts of related information at the state level, including:

- For the period 2008-2015, tuition increases by percentage (e.g., Oregon: 31.5%)

- For the period 2008-2015, tuition increases by dollar amount, inflation adjusted (e.g., Oregon: \$2,141)
- For the period 2014-2015, tuition increases by percentage (e.g., Oregon: 2.2%)
- For the period 2014-2015, tuition increases by dollar amount, inflation adjusted (e.g., Oregon: \$189)

This article is useful for this specific research study because it provides information and specific statistics that identify the reduction in state funding for higher education that is driving the need for additional philanthropic donations to address the funding gap. The article also explains the connection between reductions in state funding and increased tuition costs while showing the associated risk of diminishing the quality of education.

National Science Board. (2012). Diminishing funding and rising expectations: Trends and challenges for public research universities. *National Science Foundation*. Retrieved from <http://www.nsf.gov/nsb/sei/companion2/files/nsb1245.pdf>

Abstract. In the 2012 edition of Science and Engineering Indicators (*Indicators*), the National Science Board (Board) reported a substantial decline over the last decade in per student state appropriations at the Nation's major public research universities. This policy companion report to Indicators 2012, *Diminishing Funding and Rising Expectations: Trends and Challenges for Public Research Universities*, highlights the importance of these universities to the local and national economies, rising public expectations for these institutions, and the challenges posed by recent trends in enrollment, revenue, and expenditures.

In the wake of increasing enrollment and costs and declining per student state appropriations, the Board is concerned with the continued ability of public research universities to provide affordable, quality education and training to a broad range of students, conduct the basic science and engineering research that leads to innovations, and perform their public service missions. In future editions of *Indicators*, the Board intends to expand the treatment of higher education institutions while providing greater depth of analysis specific to public research universities.

Summary. This companion report to the Science and Engineering Indicators of 2012 outlines trends in enrollment at public research universities, state appropriations, and tuition increases. The authors report a substantial decline in student state appropriations at public research universities across the United States over the last decade. The authors report that the situation is exacerbated by the fact that enrollment and operating costs of these universities are increasing at the same time that state support is decreasing and express their concern that these universities will not be able to continue to provide affordable, quality educations for their students. This article is useful for this specific research study because it provides background on factors such as reduced state funding, increasing enrollments, and increasing operating costs that have led to serious issues with higher education affordability and university budget shortfalls.

Resources focused on Alumni Engagement and Donations

Doak, J. (2011). Prepare to engage: Building relationships through social media is a smart investment for institutions. *Currents*, 37(8), pp. 46-51.

Abstract. The people an educational institution is trying to reach--prospective and current students, alumni and parents, to name a few--are no longer passive recipients of press releases and newsletters. They are on Facebook, Twitter, LinkedIn, Google+, and any other social media platform that comes to mind. What can sometimes get lost amid the constant creation, demise, and rebirth of social networks is a sense of why an institution is in these spaces in the first place. The author stresses that one needs to remember that social media tools are merely methods of communicating; the goal of this communication is genuine engagement with the people who are important to an institution. Keeping this in mind can help keep the institution grounded in the constantly shifting social media landscape. The author believes that building relationships through social media is a smart investment for institutions.

Summary. In this article, Doak writes about how social media is being used to engage alumni, challenges to be expected, and how to measure success. She begins by stressing that social media is simply a means of communicating and that institutions should keep this in mind in order to stay grounded amidst the ever-shifting social media landscape. Regarding collaboration within a university, she suggests creating a cross-campus, social media working group where people can talk about issues and discuss best practices. Building alumni engagement via social media takes great care. Each institution will look to the institution's specific culture and priorities to determine how to maintain their social communities.

Doak warns that not all content posted by constituents will be positive and stresses that having a strong social media policy is the best defense against negative comments.

Using what she learned from her colleagues at Cornell, Doak recommends rather than reacting immediately to negative comments, institutions should monitor situations to see if the negativity is being repeated elsewhere. Doak suggests the use of Google Alerts, Meltwater Buzz and other technology tools to help monitor social media content. Negative comments will often lose traction as new content is created, and Doak mentioned that other members of your community may come to your defense, which can build engagement and trust. Measuring success can come from the number of likes and click-throughs, but Doak suggests that interaction should be the main metric, such as retweets or shares, mentions, and comments. Doak closes out the article with the suggestion of starting small, listening, and tweaking your social media program based on what you learn.

This article is useful for this specific research study because it provides an example of how social media is being used effectively to engage stakeholders of a higher education institution. It provides useful information on building alumni engagement via social media, including how to collaborate with other social media owners from the same campus, react to negative comments from followers, and measure the effectiveness of social media campaigns.

Jarrell, A. (2013). Crowd around: Expanding your donor pool with crowdfunding. *Currents*, 39(5), 40-44.

https://www.case.org/Publications_and_Products/2013/MayJune_2013/Crowd_Around.html

Abstract. At most institutions, annual fund-giving is down. Crowdfunding sites allow people with a great idea or worthy cause to bypass traditional funding methods and take their case directly to web-savvy investors and donors. This article describes how higher education institutions are expanding their donor pool through such crowdfunding sites as USEED, MiddSTART, and ScaleFunder.

Summary. In this article, Jarrell begins by describing what crowdfunding is before detailing the impact crowdfunding has had on higher education advancement and offering suggestions on engaging the next generation of donors. She suggests that crowdfunding is a more enjoyable way for donors to give at all giving levels than traditional means of giving, such as mailing a check to a fundraising organization from a mailing appeal. Jarrell explains that crowdfunding platforms provide a more immediate and personal experience for donors who want to see the impact of their gifts. She argues that microphilanthropy has the potential to alter the future of fundraising, similar to how Facebook and Twitter changed the norms and expectations for communication. Jarrell reports that annual fund giving is down at most institutions and that many programs are having difficulty acquiring new alumni donors. She goes on to explain that younger alumni are less inclined to give back to their institutions than their parents. Jarrell suggests that institutions should put some fun back into the donor experience by using social media, which already has a culture of fun, informality, and connecting with people of similar interests.

Jarrell reports that many crowdfunding donors are actually major gift prospects and institutions have an opportunity to broaden their donor pipeline by using the data from

crowdfunding platforms. She offers up two crowdfunding providers, ScaleFunder and USEED, that can integrate with an institution's alumni and donor database. Jarrell points out that advancement offices can use this data to track how their young alumni give now to understand a constituent's interest and use that information when it comes time to ask for a major gift. This article is useful for this specific research study because it focuses on a social media enabled fundraising mechanism that is more effective with younger donors than traditional fundraising mechanisms.

Saxton, G., Wang, L. (2014). The social network effect: The determinants of giving through social media. *Nonprofit and Voluntary Sector Quarterly*, 43(5), pp.850-868.

Abstract. Social networking applications such as Facebook, Twitter, and Crowdrise offer new ways for nonprofits to engage the community in fundraising efforts. This study employs data from Facebook Causes to examine the nature and determinants of charitable giving in social networking environments. Our findings suggest donations on these sites are not driven by the same factors as in "off-line" settings. Instead, a social network effect takes precedence over traditional economic explanations. Facebook donors do not seem to care about efficiency ratios, their donations are typically small, and fundraising success is related not to the organization's financial capacity but to its "Web capacity." Moreover, online donors are prone to contribute to certain categories of causes more than others, especially those related to health. Given the growth in social media-driven fundraising—and the increase in crowdfunding, slacktivism, impulse donating, and other new practices this entails—these findings carry notable theoretical and practical implications.

Summary. This article is driven by two research questions: (a) what does charitable giving on social networking sites look like?; and (b) what factors help organizations generate higher levels of social networking-based donations? Current models of social media use by nonprofits are outlined and new models are suggested. The authors use Facebook Causes as the giving mechanism to research social media donations and use data from three models to show the different levels of effectiveness. Social media platforms have created new ways of giving and receiving charitable donations. The authors note that an organization looking to expand its social media presence to engage with their constituents should start by increasing the quality and influence of their website, arguing that the website serves as a portal to social media sites and serves as a channel for donors to obtain information. This article is useful for this specific research study because it focuses on best practices for charitable giving on social media.

Resources focused on the Use of Social Media in Organizations

Goldkind, L. (2015). Social media and social service: Are nonprofits plugged in to the digital age? *Human Service Organizations: Management, Leadership & Governance*, 39(4), 380-396. <http://dx.doi.org/10.1080/23303131.2015.1053585>

Abstract. Social media has become ubiquitous in everyday life as well as a part of many organizational cultures and communications plans. However, in the nonprofit sector, in which technology adaption has historically been slower than the corporate sector, social media use is less pervasive. This qualitative study used a Template Analysis approach to explore social media use across a sample of nonprofit human service organizations. Twenty senior leaders participated in interviews, focusing on how their organization

used social media, the effects of using electronic communications tools, and the enhancers and barriers to social media use. Four themes emerged from the analysis of the interview data: social media supports, resources, obstacles, and experiential. In addition to those themes, a classification system emerged based on Brandtzaeg's media user typology. The author discusses practice implications and considers directions for future research.

Summary. This research article reports on a qualitative study that focuses on how pervasive social media use is in the nonprofit sector. The ability for nonprofits to communicate with their constituents has significantly increased due to the spread of social media; however, the author questions whether nonprofits are using social media to the maximum effect and whether nonprofits are measuring the effects of their social media use. GoldKind addresses these three topics: (a) fundraising with social media, (b) policy advocacy and social media, and (c) media user typology.

Goldkind used data from 20 phone interviews, using these two research questions to guide the qualitative interviews: (a) What does social media use look like in nonprofit organizational settings? and (b) What support structures enhance social media use and what institutional barriers limit social media use in the organizational setting? The questions Goldkind asked of participants were organized into five themes: (a) social media use, (b) social media structural supports, (c) resources, (d) obstacles, and (e) visceral-intuitive-experiential (e.g., enthusiasm, fear, relationships, sharing). Per the analysis of the information collected and research performed, Goldkind concluded that nonprofit leaders have not fully embraced social media use for comprehensive

communication and fundraising. Specific findings on areas that are lacking include (a) senior leaders' knowledge and understanding of social media, (b) having a social media strategy, and (c) haphazard approaches to social media implementation.

This article is useful for this specific research study because Goldkind obtained feedback on social media use for fundraising from a pertinent constituency for this research study: nonprofits. Goldkind's findings of how nonprofit leaders have yet to fully embrace social media as an effective communication medium are useful for this study as they inform on the state of social media in nonprofits and provide direction on how nonprofits can implement successful social media programs.

Halijgan, T. (2010). The social media evolution: Online tools drive opportunities for alumni outreach, fundraising. *Community College Journal*, 80(4), 30-33. (Accession No. 48553206)

Abstract. Camden County College (CCC), one of the largest community colleges in New Jersey, uses Web sites, e-mail, e-newsletters, and social media such as Facebook, Twitter, and YouTube to engage alumni and keep them involved in the college community. Colleen Reynolds, HCC's associate director of alumni relations and outreach, launched a Facebook page to invite alumni to events, "it's a way to drive alumni to our Web site," she says, adding that some 350 alumni are registered on HCC's Facebook site.

Summary. This article discusses how colleges use websites, email, e-newsletters, and social media such as Facebook, Twitter, and YouTube to engage alumni and keep them involved in the college community. Halijgan focuses on community colleges in this study,

providing examples of social media use in multiple community colleges. He touches on multiple subjects, such as how colleges are in search of new funding streams due to the decrease in budgets and increase in enrollments, and how colleges use social media and other electronic communication avenues to connect with their alumni. Halijgan outlines a plan for implementing a social media strategy for colleges, including creating a strategy, building the right content, creating the right architecture, building intuitive navigation, and measuring return on investment. This article is useful for this specific research study because it relates to higher education social media and connecting with alumni and provides specific recommendations for building a social media strategy to secure and retain alumni engagement. Specific recommendations include: creating a strategy, building the right content, creating the right architecture, building intuitive navigation, and measuring return on investment.

Lovejoy, K., Waters, R., & Saxton, G. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review*, 38(2), 313-318. <http://dx.doi.org/10.1016/j.pubrev.2012.01.005>

Abstract. While it may seem difficult to communicate in a meaningful manner with 140 characters or less, Twitter users have found creative ways to get the most out of each Tweet by using different communication tools. This paper looks into how 73 nonprofit organizations use Twitter to engage stakeholders not only through their tweets, but also through other various communication methods. Specifically it looks into the organizations utilization of tweet frequency, following behavior, hyperlinks, hashtags, public messages, retweets, and multimedia files. After analyzing 4655 tweets, the study

found that the nation's largest nonprofits are not using Twitter to maximize stakeholder involvement. Instead, they continue to use social media as a one-way communication channel as less than 20% of their total tweets demonstrate conversations and roughly 16% demonstrate indirect connections to specific users.

Summary. The topic of this article is how organizations are using Twitter to engage with stakeholders, or followers. The article offers suggestions on how to use Twitter more effectively to engage with followers; for example, organizations can use Twitter to receive real-time feedback from their followers and engage in conversations. The authors report that although there is promise in using Twitter to cultivate relationships, few organizations are fully utilizing Twitter for this purpose, instead rather simply broadcasting one-way messages. The authors refer to a study that took place looking to answer whether nonprofit organizations are fully utilizing the tools available to them on Twitter. The criteria used to determine utilization of Twitter included looking at the number of followers, the number and frequency of tweets sent out by an organization, the number of hyperlinks used in tweets, the number of times an organization retweets, and the number of hashtags used in tweets. The authors conclude that organizations are still puzzled over how to best use Twitter to connect with their stakeholders. Twitter is more complex than it seems at first glance, yet organizations are only limited by their imagination in how they can use the communication tool. This article is useful for this specific research study because it offers practical advice and examples for another social media tool that can be used to engage stakeholders.

Matei, S., Russel, M., & Bertino, E. (2015). Transparency in social media: Tools, methods and algorithms for mediating online interactions. *Cham: Springer*.

<http://dx.doi.org/10.1007/978-3-319-18552-1>.

Abstract. The volume presents, in a synergistic manner, significant theoretical and practical contributions in the area of social media reputation and authorship measurement, visualization, and modeling. The book justifies and proposes contributions to a future agenda for understanding the requirements for making social media authorship more transparent. Building on work presented in a previous volume of this series, Roles, Trust, and Reputation in Social Media Knowledge Markets, this book discusses new tools, applications, services, and algorithms that are needed for authoring content in a real-time publishing world. These insights may help people who interact and create content through social media better assess their potential for knowledge creation. They may also assist in analyzing audience attitudes, perceptions, and behavior in informal social media or in formal organizational structures. In addition, the volume includes several chapters that analyze the higher order ethical, critical thinking, and philosophical principles that may be used to ground social media authorship. Together, the perspectives presented in this volume help us understand how social media content is created and how its impact can be evaluated. The chapters demonstrate thought leadership through new ways of constructing social media experiences and making traces of social interaction visible. Transparency in Social Media aims to help researchers and practitioners design services, tools, or methods of analysis that encourage a more transparent process of interaction and communication on social

media. Knowing who has added what content and with what authority to a specific online social media project can help the user community better understand, evaluate and make decisions and, ultimately, act on the basis of such information.

Summary. This book on transparency in social media offers advice on how to encourage researchers and practitioners to have a more transparent process of interaction and communication on social media by designing services, tools, or methods of analysis. The book explores the following core issues:

- How do author feedback and incentive structures influence participation, value creation and reputation of social communities and social media content creation in various contexts—commerce, education, entertainment, government?
- In what ways does curation infrastructure influence content creation—e.g., crowdsourcing—and sharing. How do the participants' perception of the factors influence content credibility, risk and trustworthiness? What types of statistical strategies or procedures are needed to better understand how social media roles emerge, function, generate valuable content, accrue trust and inspire credibility?
- What kinds of tools, especially net-centric statistical analysis aimed at large social media datasets, can be adapted to make social media interactions more transparent to social science researchers or avid content authors?
- What new approaches are needed to explore security and user identity in social media contexts?
- What ethical and philosophical dimensions are involved in social media authorship and analysis processes?

This book is useful for this specific research study because it provides a framework for best practices in constructing a transparent social media program, an essential building block in making a social media program effective.

Pomerantz, J., Hank, C., & Sugimoto, C. (2015). The state of social media policies in higher education. *PLoS ONE PLOS ONE*, 10(5). <http://dx.doi.org/10.1371/journal.pone.0127485>

Abstract. This paper presents an analysis of the current state of development of social media policies at institution of higher education. Content analysis of social media policies for all institutions listed in the Carnegie Classification Data File revealed that less than one-quarter of institutions had an accessible social media policy. Analysis was done by institution and campus unit, finding that social media policies were most likely to appear at doctorate-granting institutions and health, athletics, and library units. Policies required that those affiliated with the institution post appropriate content, represent the unit appropriately, and moderate conversations with coworkers and external agencies. This analysis may inform the development and revision of social media policies across the field of higher education, taking into consideration the rapidly changing landscape of social media, issues of academic freedom, and notions of interoperability with policies at the unit and campus levels.

Summary. In this article, the authors write about social media policies in organizations. Examples of rogue tweets that resulted in disciplinary measures of individuals are used to show the purpose of having organizational social media policies. The literature obtained for this article answers the questions:

- Why should organizations have social media policies?

- How can an organization write these policies to be most effective?
- How can an organization leverage social media for the benefit of the organization?

Researching higher education institutions that have social media policies, they found that 822, or 18% of all higher education institutions surveyed, had social media policies that were publicly available. Enforcement of these policies was not referred to any specific individual, but rather the director of the college unit or the office of the president. The authors conclude by suggesting higher education institutions should develop social media policies quickly that take into account the rights of students and faculty. Having a social media policy in place will clearly convey the responsibilities of social media owners and provide higher education institutions with a response plan to use in response to the posting of negative social media posts or comments. The authors suggest that the responsibility for developing, maintaining, and enforcing the institution's social media policy should reside with the President's office.

This article is useful for this specific research study because it addresses the importance for institutes of higher education of having a social media policy; answers the questions of who is responsible for developing, maintaining, and enforcing the policies; and provides examples of the consequences that occur when these policies are not in place.

Sessa, W. (2015). Targeting Millennials: Social media strategies within higher education. *College and University, 90*(1), 2-11.

Abstract. Using a quantitative survey method with an online questionnaire as the data collection tool, the author surveyed 189 social media managers working at American

Higher Education institutions to identify forms of social media in use, along with the most popular strategies that colleges and universities use with Facebook.

Summary. The focus of this article is on Millennials and how higher education institutions connect with them using social media. The authors identify the most widely used forms of social media by higher education institutions and which social media forms are gaining popularity among Millennials. The research questions that guided this study are:

- What were the most popular social media used by American higher education institutions in 2012?
- Since 2010, what new popular social media tools have emerged?
- For what specific purposes are American higher education institutions using Facebook?
- What are the most popular strategies that higher education social media managers are using with Facebook?
- Are Facebook efforts to engage stakeholders found to be effective?

The study finds that Facebook is the most popular social media site in use by higher education institutions, with Twitter and YouTube the next most widely used social media sites. Other social media sites used by higher education institutions include Pinterest, Flickr, Google+, and Instagram. This article is useful for this specific research study because it reviews multiple social media sites to determine which ones are the most used among Millennials. Knowing which social media sites are being used by this always-connected

generation is imperative to enable effective communication with them in ways that they prefer to encourage engagement with, and donations to the institution.

Resources focused on Analytics

Blanchard, O. (2011). *Social media ROI: Managing and measuring social media efforts in your organization. Que Publishing.*

Abstract. Use this book to bring true business discipline to your social media program and align with your organization's goals. Top branding and marketing expert Olivier Blanchard brings together new best practices for strategy, planning, execution, measurement, analysis, and optimization. You will learn how to define the financial and nonfinancial business impacts you are aiming for--and achieve them. Social Media ROI delivers practical solutions for everything from structuring programs to attracting followers, defining metrics to managing crises. Whether you are in a startup or a global enterprise, this book will help you gain more value from every dime you invest in social media.

Summary. In Blanchard's book on social media ROI, he addresses choosing the best social media platform, setting up processes to achieve goals, extracting meaning from data collected from social media campaigns, and quantifying results to determine ROI. Social media can be used to build a community around an organization (Blanchard, 2011). In addressing how not-for-profit organizations can use social media, Blanchard writes how social networks are the perfect environments to drive participation for nonprofits, giving them a low-cost, global communication channel (Blanchard, 2011).

In order to achieve integration of a social media program with business objectives and strategies, support from the CEO will be important. The program should solve a critical business problem or objective and help the organization accomplish its goals quicker, better, and more cost effectively. Demonstrating some of these benefits to the CEO will help get buy-in for the social media program (Blanchard, 2011).

Social media objectives should tie directly to business objectives. The social media program should be managed collaboratively with stakeholders from employees in units throughout the organization, not in a vacuum (Blanchard, 2011). This book is useful for this specific research study because it offers specific methods of determining the ROI of social media programs. The ability to demonstrate a positive ROI is important when proposing to build a social media program to decision makers in an organization.

Kanter, B., & Paine, K. (2012). *Measuring the networked nonprofit: Using data to change the world*. New York: Wiley.

<http://site.ebrary.com/libproxy.uoregon.edu/lib/uoregon/reader.action?docID=106125>

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Abstract. This book takes the ideas that were just germinated in that poetry slam and builds them into solid advice illustrated with dozens of examples of nonprofits that have also made the leap from measurement-phobes to measurement mavens. *Measuring the Networked Nonprofit* aims at helping nonprofit leaders take those first steps to measure the effectiveness of that transformation.

Summary. *Measuring the Networked Nonprofit: Using Data to Change the World* is a book focused on nonprofits using data to measure the effectiveness of their social

media use. Part two, chapter seven is dedicated to social fundraising and how measurement can make social fundraising more effective. The authors define social fundraising and explain that measurement of social fundraising is not measured solely by funds raised but should also include these measures:

- Increasing the size and strength of your network
- Increasing awareness of your cause
- Identifying new networks and partners
- Growing the lifelong value of your donors

The authors provide examples of social fundraising tools, including Crowdrise, Fundly, and Network For Good. They explain how an institution's stakeholders, or current donors, can be the best fundraisers. Collecting data is not enough, but rather institutions should be transforming the information into action to make strategic improvements. The authors convey the importance of engaging stakeholders in fundraising efforts and setting measurable objectives for increasing levels of engagement. Throughout this section of the book the authors bring up the importance of engagement. Having micro-campaigns can bring in funds, but they also allow the institution to bring in new donors, potentially major gift donors. This book is useful for this specific research study because it explains how important engaging donors and their friends is to building a pipeline of donors for an institution and provides practical advice on how to use the information provided through social fundraising tools to build stakeholder engagement.

Kaushik, A. (2010). *Web analytics 2.0: The art of online accountability and science of customer centricity*. Indianapolis, IN: Wiley.

Abstract. Web Analytics 2.0 presents a new framework that will permanently change how you think about analytics. It provides specific recommendations for creating an actionable strategy, applying analytical techniques correctly, solving challenges such as measuring social media and multichannel campaigns, achieving optimal success by leveraging experimentation, and employing tactics for truly listening to your customers. The book will help your organization become more data driven.

Summary. Kaushik's book is primarily focused on web analytics and how to use the information garnered from analytics to make data-driven decisions. Chapter nine is dedicated to emerging analytics and analyzing customer experience. Customer experience affects the engagement of stakeholders and the growth of the number of followers. Kaushik examines offline customer experience, mobile customer experience, and social media customer experience. He explains how analyzing the growth (or decline) of followers is a determining factor in quantifying customer experience. Metrics can be created to determine ROI, direct value, and even unquantifiable value. Kaushik stresses that organizations should use customers' actual behaviors to measure value. This book is useful for this specific research study because it explains how analytics can be used to determine the success of a social media program.

Khan, G. (2015). *Seven layers of social media analytics: Mining business insights from social media text, actions, networks, hyperlinks, apps, search engine, and location data* [Kindle edition]. *CreateSpace Independent Publishing Platform*. Retrieved from Amazon.com.

Abstract. The book offers concepts, tools, tutorials, and case studies that business managers need to extract and analyze the seven layers of social media data, including text, actions, networks, apps, hyperlinks, search engines, and location layers. Social media analytics is about converting unstructured social media data into meaningful business insights. By the end of this book, you will have mastered the concepts, techniques, and tools used to extract business insights from social media that help increase brand loyalty, generate leads, drive traffic, and ultimately make good business decisions. The book is non-technical in nature best suited for business managers, owners, consultants, students, and professors, etc.

Summary. Seven Layers of Social Media Analytics defines the seven layers as text, actions, networks, apps, hyperlinks, search engines, and location. Each layer is described in its own chapter and follows a common theme of identifying the data source, procuring the data, analyzing the data, and creating action from the data. Khan states how social media analytics should be strategically aligned to support existing business goals. He explains how important formulating a social media strategy is and outlines steps in creating the social media strategy. A social media strategy should be designed to facilitate the business objectives of an organization, contain a content and platform strategy, include resource considerations, and establish a social media ownership plan and policy. Khan provides a brief social media strategy implementation plan and suggests the use of analytics to track progress. Khan closes the book with suggestions for managing social media risks and ideas for how to identify, assess, and mitigate risk. This book is useful for this specific research study because it provides a framework for

the seven layers of social media analytics and clearly outlines how to manage the data for each layer. The book is also useful for explaining why having a social media strategy is important.

Conclusion

State funding for U.S. institutes of higher education remains lower than before the effects of the recession that started in December 2007, while enrollment in these institutions is rising. The reductions in state funding coupled with higher costs have forced higher education institutions to address the financial gap; one common means is through increasing tuitions. In order to address the continuing increased cost of education for students, colleges and universities are exploring other means of increasing available funds without resorting to tuition increases. One avenue that shows promise is by engaging alumni through social media in order to boost their philanthropic participation.

The 15 references selected for this Annotated Bibliography serve to help presidents of higher education fundraising institutions understand the importance of engaging their institutions' alumni as well as provide a framework and guidance to social media owners that they can use to build or improve their social media campaigns. Themes include (a) reductions in state funding for and resulting increases in tuition, (b) alumni engagement and donations, (c) use of social media in organizations, and (d) analytics.

Theme 1 – Reductions in State Funding and Resulting Increases in Tuition for Higher

Education

The impact of the recession that began in December 2007 had a disruptive effect on higher education. State appropriations for higher education dropped substantially and still remain lower today than before the impact of the recession in many states (Goldkind, 2015). For instance, in Oregon, state support of higher education remains 13% lower today than in 2009 (Carlson, 2015). Enrollment in higher education institutions has been on the rise,

increasing 24% from 2002 to 2012 (Nces.ed.gov, 2015) and is projected to increase another 16% by 2019 as more individuals pursue a college education (National Science Board, 2012). The decline in state funding, coupled with current and projected enrollment increases, can impact institutions' financial health and the quality of education provided (Mitchell & Leachman, 2015; National Science Board, 2012).

Higher education institutions have taken drastic measures to close the ever-widening gap between state support and the cost of education, such as cutting faculty positions, eliminating course offerings, closing campuses, shutting down computer labs, and reducing other services such as library services (Mitchell & Leachman, 2015). These measures introduce the risk of diminishing the quality of education. A related concern raised by the National Science Board (2012) is the impact of the reduction in per student state appropriations on U.S. major public research universities. The Board (2012) notes the important role that these universities play in local and national economies, and questions the impact of reduced state funding on the universities' abilities to conduct the basic science and engineering research that leads to innovations.

The drastic reductions in state appropriations for higher education institutes have forced these institutions to raise tuition. In Oregon, tuition has increased 31.5% from the period of 2008 to 2015 (Mitchell & Leachman, 2015). The ever-increasing cost of a college education raises particular concern for students who come from families with financial challenges (Mitchell & Leachman, 2015). Higher education institutions are relying on alternative funding sources, such as philanthropic donations, to supplement state funding to help control tuition costs (VSE, 2014).

Theme 2 – Alumni Engagement and Donations

Fundraising for higher education has grown steadily after the impact of the recession up until fiscal year 2013 when the trend started to decrease (CASE, 2015a). Donors are giving to student scholarships, but only a small percentage of alumni are donating to their universities. In 2014, the funding of student scholarships represented 43.6% of all endowed gifts to universities, while only 8.3% of alumni donated to their universities (VSE, 2014). This presents an opportunity for higher education fundraising institutions to tap into a relatively under-utilized donor base and engage with their alumni to seek donations for student scholarships.

Communicating effectively with alumni to engage them in their university is imperative to increase their participation in philanthropy. The goal of this communication is genuine engagement with the people who are important to the institution (Doak, 2011). Doak (2011) notes that an institution must ensure that the social media plans used to foster alumni engagement are congruent with the institution's specific culture in order to be effective.

Jarrell (2013) provides recommendations for engaging younger alumni, who are less inclined to give back to their institutions than their parents, and encouraging them to donate. These suggestions include using crowdfunding as a donation mechanism, as it provides a more enjoyable means of giving for donors than traditional methods. Jarrell (2013) also notes that many crowdfunding donors are actually major gift prospects. By using analytics provided through crowdfunding tools, an institution can better understand the means of engaging younger alumni who donate in order to understand their interests and more effectively encourage major gift donations later.

Multiple mediums can be used to provide online giving opportunities, including the institution's website giving page, crowdfunding services such as Network for Good, and social media websites (Kanter & Paine, 2012). Saxton and Wang (2014) note that an organization looking to expand its social media presence to engage with their constituents should start by increasing the quality and influence of their website, arguing that the website serves as a portal to social media sites and serves as a channel for donors to obtain information.

Theme 3 – Use of Social Media in Organizations

Social media adoption in the nonprofit sector has historically been slower, with less pervasive use, than in the corporate sector (Goldkind, 2015). According to Goldkind (2015), nonprofit leaders have not fully embraced social media use for comprehensive communication and fundraising. Lovejoy, Waters, and Saxton (2012) corroborate this assessment, but with a focus on Twitter, reporting that the nation's largest nonprofits are not using Twitter to maximize stakeholder involvement. Specific findings indicate that less than 20% of these organizations' tweets demonstrate conversations and 16% demonstrate indirect connections to specific users. Lovejoy, Waters, and Saxton (2012) note that a better use of Twitter to promote engagement is to use it to receive real-time feedback from followers and engage in conversations.

The overall findings of the research indicate that in order to communicate with alumni in a way that is preferable to them, higher education fundraising institutions will need to adopt social media as a communication medium (Sessa, 2015). Goldkind (2015) provides guidance on the support structures that foster social media use, including: (a) a supportive board, (b) a

social media policy, (c) inclusion of analytics/evaluation, and (d) an appropriate level of resources (Goldkind, 2015). Barriers that limit the use of social media that must be addressed include: (a) challenges, (b) technical difficulties, (c) internal knowledge, and (d) scarcity of resources (Goldkind, 2015).

Creating and implementing a strategic social media program involves (a) creating a strategy, (b) building the right content, (c) creating the right architecture, (d) building intuitive navigation, and (e) measuring return on investment (Halijgan, 2010). Including policies in a social media program will clearly convey the responsibilities of social media owners, clarify the rights of students and faculty, and provide higher education institutions with a response plan for when a negative social media posts or comments are written (Pomerantz, Hank, & Sugimoto, 2015). Pomerantz, Hank, and Sugimoto (2015) note that only 18% of higher education institutions surveyed have social media policies and recommend that the office of the President should develop, maintain, and enforce these policies.

Theme 4 - Analytics

Analytics can be used to measure the success of a social media program as well as improve the effectiveness of future social media campaigns. One measure of success, ROI, is important to determine when defending the program to the president and seeking the president's support (Blanchard, 2011). Other measures include increasing the size and strength of the institution's social media network, identifying new networks and partners, and growing the lifelong value of donors (Kanter & Paine, 2012). Setting clear objectives for social media programs will allow higher education institutions to measure the success of the programs (Halijgan, 2010).

Collecting data is not enough; institutions should be transforming the information into action to make strategic improvements (Kanter & Paine, 2012). This is where institutions can improve the effectiveness of future social media campaigns; by using the analytics garnered from past campaigns, social media owners can modify their future social media campaigns based on analytics of the data. Kaushik (2010) notes that organizations need to analyze customer experience, as it affects the engagement of stakeholders and the growth of followers. One specific example Kaushik (2010) provides is that the analysis of the growth or decline in the number of followers is a determining factor in quantifying an organization's customer experience.

Khan (2015) provides a strategic framework for an institution's social media owners that includes seven layers of social media analytics: text, actions, networks, apps, hyperlinks, search engines, and location. For each of the seven layers, Kahn (2015) recommends an approach of identifying the data source, procuring the data, analyzing the data, and creating action from the data. Khan (2015) also conveys the importance of strategically aligning social media analytics to support existing business goals.

Summary

The funding situation in higher education is dire. The cost of education is increasing while state support of education has been decreasing (Mitchell & Leachman, 2015; National Science Board, 2012). Higher education institutions are ramping up their fundraising efforts to help control this dire situation (VSE, 2014). Donors are giving to student scholarships, yet universities' alumni are a deeply under-utilized donor base (VSE, 2014). This donor pool will need to be engaged to seek out donations for student scholarships. Non-traditional methods of

fundraising communications will be necessary to successfully reach this donor pool (Sessa, 2015). Using social media to engage and communicate with alumni is desirable because many alumni prefer this communication medium (Sessa, 2015). Analytics garnered from social media programs will increase their effectiveness (Kaushik, 2010). The resources included in this annotated bibliography provide a framework for building a successful social media program tailored towards fundraising for higher education institutions.

References

- Blanchard, O. (2011). *Social media ROI: Managing and measuring social media efforts in your organization* [Kindle version]. Que Publishing. Retrieved from Amazon.com.
- Carlson, A. (2015). *Grapevine*. Illinois State University's Center for the Study of Education Policy. Retrieved from Illinois State University, College of Education website:
<http://education.illinoisstate.edu/grapevine/tables/>
- Case.org. (2015b). *CASE Fundraising Index*. Retrieved 18 November 2015, from
http://www.case.org/Samples_Research_and_Tools/Benchmarking_and_Research/Surveys_and_Studies/CASE_Fundraising_Index.html
- Case.org. (2015a). *Fundraising Fundamentals, Section 1.2, The Role and Importance of Alumni Relations*. Retrieved 18 November 2015, from
https://www.case.org/Publications_and_Products/Fundraising_Fundamentals_Intro/Fundraising_Fundamentals_section_1/Fundraising_Fundamentals_section_12.html
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: SAGE.
- Doak, J. (2011). Prepare to engage: Building relationships through social media is a smart investment for institutions. *Currents*, 37(8), pp. 46-51.
- Center for Public Issues Education (n.d.). Evaluating Information Sources. *University of Florida*. Retrieved from <http://ce.uoregon.edu/aim/Capstone1Perm/evaluateinfo.pdf>
- Flannery, H., Harris, R., & Rhine, C. (2009). *2008 DonorCentrics Internet giving benchmarking analysis*. Charleston, SC: Target Analytics. Retrieved from

<https://www.blackbaud.com/files/resources/downloads/cam/TargetInternetGivingSummary2008.pdf>

Flannery, H., & Harris, R. (2011). *2011 DonorCentrics Internet and multichannel giving benchmarking report*. Charleston, SC: Target Analytics. Retrieved from

https://www.blackbaud.com/files/resources/downloads/WhitePaper_MultiChannelGivingAnalysis.pdf

Goldkind, L. (2015). Social media and social service: Are nonprofits plugged in to the digital age? *Human Service Organizations: Management, Leadership & Governance*, 39(4), 380-396.

<http://dx.doi.org/10.1080/23303131.2015.1053585>

Halijgan, T. (2010). The social media evolution: Online tools drive opportunities for alumni outreach, fundraising. *Community College Journal*, 80(4), 30-33. (Accession No. 48553206)

Jarrell, A. (2013). Crowd around: Expanding your donor pool with crowdfunding. *Currents*, 39(5), 40-44.

https://www.case.org/Publications_and_Products/2013/MayJune_2013/Crowd_Around.html

Jessell, K. (2013). The large public university. *Nacubo*. Retrieved 25 November 2015, from

<http://www.nacubo.org/Documents/products/CFOPerspectivesJessell.pdf>

Kanter, B., & Paine, K. (2012). *Measuring the networked nonprofit using data to change the world*. New York, NY: Wiley.

<http://site.ebrary.com.libproxy.uoregon.edu/lib/uoregon/reader.action?docID=106125>

- Kaushik, A. (2010). *Web analytics 2.0: The art of online accountability and science of customer centricity*. Indianapolis, IN: Wiley.
- Khan, G. (2015). *Seven layers of social media analytics: Mining business insights from social media text, actions, networks, hyperlinks, apps, search engine, and location data*. CreateSpace Independent Publishing Platform.
- Lovejoy, K., Waters, R., & Saxton, G. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review*, 38(2), 313-318. <http://dx.doi.org/10.1016/j.pubrev.2012.01.005>
- Matei, S., Russel, M., & Bertino, E. (2015). *Transparency in social media: Tools, methods and algorithms for mediating online interactions*. Cham: Springer.
<http://dx.doi.org/10.1007/978-3-319-18552-1>.
- Mitchell, M., & Leachman, M. (2015). *Years of cuts threaten to put college out of reach for more students*. Center on Budget and Policy Priorities. Cbpp.org. Retrieved 8 December 2015, from <http://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students>
- National Science Board. (2012). *Diminishing funding and rising expectations: Trends and challenges for public research universities*. National Science Foundation. Retrieved from <http://www.nsf.gov/nsb/sei/companion2/files/nsb1245.pdf>
- Nces.ed.gov. (2015). *Fast Facts*. Retrieved 24 November 2015, from <http://nces.ed.gov/fastfacts/display.asp?id=98>
- Pomerantz, J., Hank, C., & Sugimoto, C. (2015). The state of social media policies in higher education. *PLoS ONE PLOS ONE*, 10(5). <http://dx.doi.org/10.1371/journal.pone.0127485>

Saxton, G., & Wang, L. (2014). The social network effect: The determinants of giving through social media. *Nonprofit and Voluntary Sector Quarterly*, 43(5), 850-868.

Sessa, W. (2015). Targeting millennials: Social media strategies within higher education. *College and University*, 90(1), 2-11.

Voluntary Support of Education (VSE). (2014). Fundraising in education: VSE annual publication.

CAE. Retrieved from: <http://cae.org/fundraising-in-education/vse-survey/vse-annual-publication/>