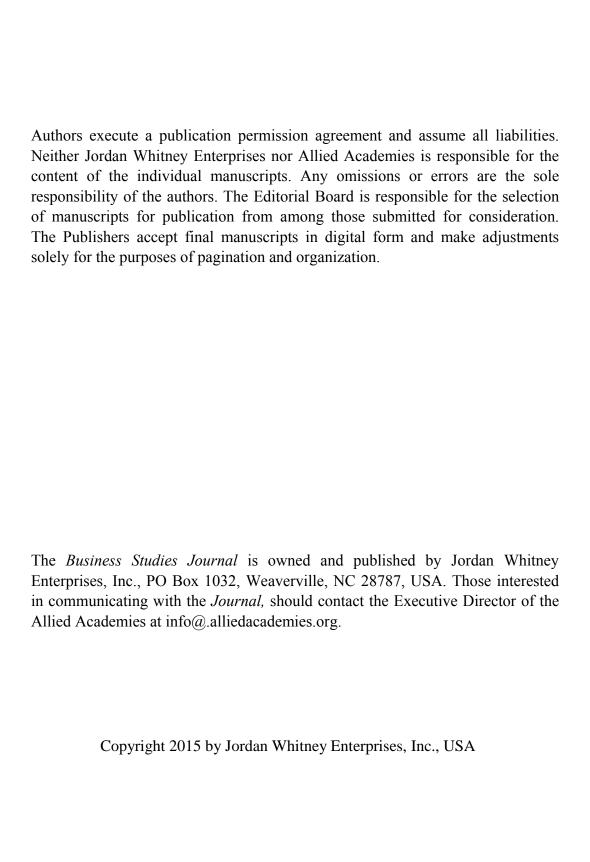
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SUSTAINABILITY REPORTING BY SMALL AND MIDSIZE COMPANIES – METHODS, NATURE AND EXTENT OF REPORTING

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ABSTRACT

Organizations of all types and across many industries implement sustainability programs that help preserve precious resources, minimize the organizations' negative impact on the environment and multiple stakeholders, and tend to reduce costs in the long-run. Organizations communicate information about their sustainability programs utilizing various methods and levels of detail. During the past decade, an increasing number of companies have started to publish formal sustainability reports; this trend continues to grow. Recent research studies investigating sustainability reporting focus on large global entities. While many small and midsize companies have implemented extensive sustainability programs, little is known about their sustainability reporting practices.

This study investigates the methods, nature, and extent of sustainability reporting by small and midsize companies to stakeholders such as investors, customers, employees, and other interested individuals and organizations. The study focuses on the small and medium-size companies identified by FORTUNE's 2013 annual survey as the 'Best Companies to Work For.'

The study found that 44% of the medium-size and six percent of the small companies in the sample issued formal comprehensive sustainability reports, most of them in a stand-alone format. Companies that issued a formal sustainability report tended to provide the greatest amount of quantitative information. Fifty percent of the companies that issued formal sustainability reports were computer-technology companies. In addition, the majority of the formally reporting companies utilized the guidelines of the Global Reporting Initiative (GRI). Overall, companies that applied the GRI guidelines tended to report more quantitative information than those that did not apply the GRI guidelines.

Although most of companies published some selected information about their sustainability-related efforts, nearly half of the medium-size and 84% of the small companies did not publish a significant amount of quantitative sustainability-related information. Moreover, those companies that published selected information tended to focus primarily on positive results and the information was largely qualitative in nature. The study found that while small and midsize companies tend to communicate information about a wide spectrum of economic, environmental, and social related sustainability efforts and some publish formal reports, comparability among companies is difficult. Information users and preparers could greatly benefit by consistent, comparable reporting of the comprehensive effect of organizations' activities on multiple current and future stakeholders.

The results from this study provide important insights about sustainability reporting by small and midsize companies that may be useful to standard-setters as well as information providers and information users. As the global sustainability-reporting trend continues, formal reporting may assist small and midsize companies to continue to create value and to enhance their comparability and competitiveness with other entities.

INTRODUCTION

Organizations of all types and sizes and across many industries have implemented sustainability-related programs. Public and private for-profit companies, governmental units, and not-for-profit entities have embraced activities and programs that preserve and protect limited resources and enhance the well-being of multiple stakeholders. Examples of sustainability-related programs and practices are numerous and include purchasing of energy efficient equipment; reducing waste and increasing recycling; reducing harmful emissions; investing in renewable energy; manufacturing and purchasing products that preserve natural resources such as water, air, and minerals; supporting product design that incorporates efficient use of resources while minimizing the negative impact on the environment; constructing new or converting existing buildings consistent with the criteria set forth by the US Green Building Council; and encouraging and supporting carpooling and telecommuting.

During the last decade, the majority of large global companies have started formal reporting of the details and results of their sustainability programs. In the U.S. and many other nations, sustainability reporting is essentially voluntary. Recent studies investigate the method, nature, and extent of sustainability reporting by large multinational companies. Relatively little is known about sustainability reporting by small and midsize companies. In addition, many of the small companies tend to be privately held and may not issue reports that are publicly available. This study investigates sustainability reporting by small and midsize companies. The sample selected represents the companies that in 2013 were ranked by FORTUNE as the "Best Companies to Work For" and were classified by the survey as medium-size and small companies.

The study finds that less than half of the companies issued a formal sustainability report; although, some of the companies provided comprehensive web-site only information. Many of the formally reporting companies utilized the reporting guidelines of the Global Reporting Initiative (GRI). The companies reported information about a wide of spectrum of sustainability-related issues concerning economic sustainability, and a wide range of environmental and social issues. While the majority of the companies that did not issue formal publicly available sustainability reports provided selected information on their websites, the nature and extent of the information provided varied considerably and tended to be qualitative in nature.

The study results suggest that consistent comparable information about organizations' sustainability would be useful to internal and external information users. The findings of this study may provide important insights that may be useful to standard-setters and information providers.

BACKGROUND LITERATURE

In 1987, the Brundtland Commission defined sustainable development as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, Brundlandt Commission, 1987, 41). The term sustainability generally relates to a company's ability to create value in the long-run. While the term "sustainability" frequently is associated with environmental issues; today, most organizations apply it in a broader sense to include the wellbeing of their employees, the community in which they operate, and other stakeholders.

Although sustainability-related activities vary considerably among organizations, a recent survey of 178 executives involved with corporate sustainability initiatives revealed that environmental and social initiatives represented the two most common types of sustainability programs (Ballou, et al., 2012). Specifically, 84.8% of the survey participants reported that their sustainability programs included environmental initiatives and 70.2% reported that their sustainability programs included social initiatives (Ballou, et al., 2012).

The trend to incorporate sustainability into an organization's operations and strategies transcends public and private companies; governmental units; and colleges and universities. Some universities have already implemented extensive sustainability-oriented programs and have made a significant commitment to sustainability-related research. For example, in 2009, California State University, Los Angeles established the *Centers for Energy and Sustainability*, which also is supported by the National Science Foundation and focuses on sustainable energy research (CSULA, n.d.). Another example is Florida International University's *Go Green* initiative, which includes a nature preserve educational program, green office efforts, and sustainability training (FIU, n.d.) In addition, some universities, such as Humboldt State University, have integrated sustainability throughout their curriculum (HSU, n.d.).

Many for-profit organizations encourage their customers to support environmental and social sustainability effort; for example, some offer incentives for switching to paperless account statements, plant trees on customers' behalf, and match customers' and clients' charitable contributions. Utility companies, such as Southern California Edison (n.d.) and Florida Power & Light Company (n.d.), provide incentives to customers to reduce the amount of energy consumed and reward customers for replacing energy-inefficient major appliances with energy-efficient ones.

While decision makers tend to realize that sustainability programs are extremely important to the wellbeing of current and future generations, cost savings also tend to provide important considerations for implementing sustainability programs. A survey of executives at large companies found that of the 274 survey respondents, 74% identified cutting costs and 68% identified shareholder expectations among the determining factors for their companies' sustainability agendas during the next two years (Ernst and Young & GreenBiz Group, 2011).

Sustainability Reporting Trend

Most companies communicate information about their sustainability efforts to their stakeholders as part of advertisements, product packaging, public relations announcements, and promotions on company websites; some may even publicize them on corporate vehicles. For example, when AT&T started adding alternative-fuel vehicles to its fleet, it also added a "Green Technology" insignia on its vehicles (ATT, 2008).

Traditionally, companies and their financial statement users focused on reporting of financial/economic results; however, during the past few decades, sustainability reporting has become an important aspect of external reporting by many companies. While some companies refer to sustainability reports as corporate social responsibility (CSR), corporate stewardship, or environmental, social, governance (ESG) reports, a recent survey (KPMG, 2013) found that currently, 43% of the largest companies in 41 countries utilized the term "sustainability report."

Studies suggest that increasingly, financial statement preparers and users recognize the value-content and importance of non-financial information. For example, a PricewaterhouseCoopers (2002) survey showed that Chief Financial Officers (CFOs) and

managing directors identified non-financial performance measures as more important than financial performance measures in determining long-term creation of investor value. A recent study (Holder-Webb et al., 2009) suggests that non-financial measures provide investors with a better understanding of corporate performance.

Consistent with these findings, reporting of non-financial information relating to organizations' creation of value has increased significantly during the past decade and recent studies suggest that formal sustainability reporting is globally continuing to gain momentum. For example, a study by Ernst & Young and Boston College Center of Corporate Citizenship (2013) revealed that 95% of the global 250 companies and 53% of the S&P 500 companies are currently issuing sustainability reports; in comparison, in 1990, only a few companies issued formal reports (EY & Boston College Center for Corporate Citizenship, 2013).

A recent survey (KPMG, 2013) investigated global reporting practices among the 100 largest companies in 41 countries. The study of the 4,100 largest companies (100 from each of the 41 countries) revealed that in the Americas, 86% of the U.S. based companies, 79% of the Canadian based companies, and 88% of Brazilian based companies reported on sustainability during the 2012/13 reporting period. In Europe, the countries with the highest reporting rates were in the U.K, with 100% of the largest companies reporting; in France, with 94% of the companies reporting; and in Denmark with 91% of the companies reporting on sustainability. In Asia Pacific, the countries with highest reporting rates were in Japan, with 99% of the companies reporting; in China, with 59% of the companies reporting; and in Australia, with 57% of the companies reporting. In the Middle East and Africa, large companies were reporting on sustainability in only three countries; these were, South Africa, with 97% of the companies reporting; Nigeria, with 68% companies reporting; and Israel, with 18% of the companies reporting (KPMG, 2013).

In the U.S. and in many other nations, reporting currently is still voluntary. However, the NASDAQ OMX a global financial exchange company, which includes the NASDAQ U.S. stock exchange, strongly encourages sustainability reporting (NASDAQ OMX, n.d.). Furthermore, the Ceres Institute recently recommended that other major U.S. stock exchanges require that companies disclose information about ten sustainability-related categories; these are governance and ethical oversight, environmental impact, government relations, climate change, diversity, employee relations, human rights, impact of products and services and integrity, supply chain, and community relations (Ceres, 2014).

While largely voluntary, sustainability reporting is motivated at least in part by investor expectations. Investors tend to expect, support, and reward responsible corporate behavior. According to the US SIF (also referred to as the Forum of Sustainable and Responsible Investment), \$3 trillion dollars are currently invested in sustainability and corporate responsibility-related funds (US SIF, 2012).

Integrated Reporting

Currently, many companies that formally report on sustainability issue a separate report that is not part of their annual report; this is especially the case for U.S. companies. However, a trend toward integrating annual financial and sustainability reporting has recently emerged. This is referred to as "Integrated Reporting." Some also refer to it as the "Triple Bottom Line," a term which stands for "People, Profit, Planet" and was coined in 1994 by John Elkington, founder of the British consulting firm "SustainAbility (The Economist, 2009).

Among U.S. based companies, integrated reporting is relatively uncommon; a 2013 report by the Investor Responsibility Research Center Institute found that only seven of the S&P 500 companies issued an integrated report (IRRCI, 2013). In some countries, reporting rules and regulations already strongly encourage or even require integrated reporting by listed companies. For instance, companies listed on the Johannesburg Stock Exchange must comply with the South African Code of Corporate Governance (King III), which requires that these companies issue an integrated report (IIRC, 2013). In Denmark, consistent with the Danish Financial Statements Act, large public companies must provide information on their corporate social responsibility-related activities in their annual report (CSRgov, n.d.). Furthermore, Brazil's BM&FBOVESPA exchange adopted a "report-or-explain" approach in 2012 (PwC, 2012), requiring that companies report sustainability-related information in their annual report or explain why they are not reporting. In France, article 225 of a 2010 law referred to as 'Grenelle II' requires that listed companies include sustainability-related information in their annual report, in essence publish an integrated report (PwC, 2012, France). While a few countries require integrated reporting, in the U.S. and in many other nations, sustainability and integrated reporting continues to be voluntary and the nature, extent and quality of reporting varies considerably.

Reporting Standards and Guidelines

The perpetual efforts of the Global Reporting Initiative (GRI) to develop and update their global sustainability reporting guidelines support a continuing global trend toward formal sustainability reporting. Currently, about 63% of the S&P 500 companies that issue formal sustainability reports utilize the guidelines provided by the GRI (E&Y & Boston College, 2013). Recent efforts by the U.S.-based Sustainability Accounting Standards Board (SASB), which is developing industry-specific sustainability reporting standards (SASB, n.d.) may further enhance this formal reporting trend and lead to more comparable reports.

In addition, the International Integrated Reporting Council (IIRC), which was established in 2010 under the Prince of Wales' *Accounting for Sustainability Project* (Accounting for Sustainability, n.d.) continues to support the emerging trend toward integrated reporting and provide the necessary framework for high-quality and comparable reporting. On December 9, 2013, after a global consultation period, the IIRC issued its first framework for integrated reporting (IIRC, 2013). On December 13, 2013, HRH the Prince of Wales' Accounting for Sustainability (A4S) Initiative established a Chief Financial Officer Leadership Network. The purpose of the Network is to share successful strategies and to "focus on the role CFOs play in integrating environmental and social issues into financial decision making." (Accounting for Sustainability, 2013, A4S CFP Leadership).

The IIRC's efforts have gained the support of key organizations. For example, the American Institute of Certified Public Accountants (AICPA) expressly welcomed the issuance of the framework (AICPA, 2013). The AICPA is also a member of the A4S Accounting Bodies Network, which helps promote accounting for sustainability and supports use of integrated reporting (Accounting for Sustainability, n.d., Accounting Bodies Network).

Small and Midsize Companies

While currently, a significant percentage of large U.S.-based and global companies issue formal sustainability reports, small and midsize companies are less likely to formally report on

their sustainability efforts. In addition, many small and midsize companies are private entities that are not required to issue annual reports, although many of them choose to issue financial statements for various reason such as to comply with lender requirements. Nevertheless, because of their frequently close relationship with their customers and clients, small and midsize companies may especially benefit from formally reporting of their sustainability efforts. This is particularly true for the increasing number of small and midsize entities that provide sustainability-related goods and services to their clients and customers to support their sustainability efforts.

Benefits of Sustainability and Integrated Reporting

Companies that voluntarily report on their sustainability efforts tend to derive multiple benefits. These include investor and customer goodwill; cost savings; enhanced understanding of the comprehensive impact of the companies' activities on multiple stakeholders; and a better understanding of the interrelationships among various departments, resources, and the external as well as internal environment. Integrating financial and sustainability information may further maximize the long-run benefits. Mervyn King, Chairman of the IIRC, links integrated reporting with 'integrated thinking.' (King, 2013). According to Mr. King, "integrated thinking' deals with value creation short, medium and long term and the integrated report tells the story of this value creation in clear, concise and understandable language" (King, 2013, 5). Thus, companies of all types and sizes may benefit from communicating their sustainability efforts through formal reporting, either in a standalone or in an integrated report.

PURPOSE OF RESEARCH STUDY

Research studies that investigate organizations' formal reporting of sustainability-related activities typically focus on large global companies that issue publicly available formal sustainability reports. Although, many small and midsize companies have implemented extensive sustainability-related projects, little information is known about their sustainability reporting practices.

Yet, small and midsize companies vitally contribute to the economy; enhance and influence the wellbeing of their clients, customers, and community in which they operate; and consume and preserve precious resources. In addition, small and midsize companies tend to have an especially close relationship with their stakeholders. Thus, information about their sustainability-related activities is very important to multiple stakeholders.

The objective of this research study was to determine the methods, nature, and extent of sustainability reporting by small and midsize companies to stakeholders such as investors, customers, employees, and other interested individuals and organizations.

RESEARCH METHODOLOGY

To accomplish the objective of this study and to address the lack of readily available comparable information, internet-based research was utilized. The methodology, including sample section, data collection, and analysis are described below.

Sample Selection

This study focused on highly regarded companies that serve as role models and trend setters within the business community and their industry and are recognized for their strong commitment to socially responsible practices. Specifically, the sample consisted of small and midsize companies recognized by FORTUNE's annual survey as the "Best companies to work for," which includes 31 small and 29 medium-size companies for the year 2013 (Fortune, 2013). These companies were selected because companies with a strong commitment to their employees' wellbeing may also show a strong commitment to other sustainability-related activities. The FORTUNE survey defines small companies as those with less than 2,500 employees and medium-size companies as those that have between 2,500 and 9,999 employees.

Data Collection

Data was collected for each of the sample companies utilizing the following systematic approach: First, company-specific websites were reviewed to determine whether a company issued a formal sustainability or integrated report. The most current available reports were downloaded for detailed review. For most companies, the most current reports were those for the 2012/13 fiscal period. In addition, publicly available annual financial reports or 10-K SEC filings were downloaded. Next, companies' sustainability-related links or WebPages were reviewed and available information downloaded or printed for further review. In addition, internet-based searches for keywords and variations of keywords, such as "sustainability," "corporate social responsibility," "corporate responsibility reporting," "environment," "green," "corporate stewardship," "community involvement," ESG (environmental, social, governance)," and other related terms were utilized to collect additional information about companies' sustainability-related activities.

Data Analysis

The data collected using internet-based research was analyzed in detail. Based on these analyses, the companies were grouped into the following eight reporting categories:

- Companies issuing formal standalone sustainability reports
- Companies issuing integrated reports
- Formally reporting companies that utilized the GRI framework
- Companies issuing annual reports
- Companies disclosing qualitative and quantitative information on their web-sites only
- Companies without significant amount of sustainability disclosures (includes companies that made only selected primarily qualitative disclosures)
- Niche companies (companies that provide goods or services that support their customers' sustainability efforts) making significant sustainability-related disclosures
- Niche companies without significant sustainability-related disclosures

Based on extensive analysis, the nature, type, and extent of sustainability-related information reported were determined and common reporting trends and related characteristics identified. For companies that issued a formal sustainability report, the reports were analyzed with reference to the specific reporting guidelines utilized.

For GRI-referenced reports, the application level (A, B, or C), the type and number of performance indicators for which information was presented for each major sustainability-related area, as well as the existence and manner of report verification (i.e., GRI verification, external third-party verification, self-reporting) were determined. For formal non-GRI referenced reports, the specific reporting guidelines referenced (if any) were noted and the issues and scope for which quantitative and qualitative information was reported identified. For companies that did not issue formal sustainability reports, their web-site information, annual reports, and news announcements were reviewed to determine the scope and level of detail that was reported. For all companies in the sample, the most frequently reported issues were identifies. The results were evaluated and summarized.

RESULTS

Detailed analysis of the data collected for the sample companies is summarized below.

Reporting Categories

Based on the analysis of the sample companies' most current sustainability reports, corporate websites, annual reports, and general internet-based information, the companies were grouped into eight reporting categories. Since sample companies could be assigned to several groups, the total percentages exceeded 100%. The related results are presented in Table 1 and briefly discussed below.

Table 1 CLASSIFICATION OF COMPANIES BY REPORTING CATEGORY			
Reporting Categories	Medium Companies N = 29	Small Companies N = 31	
	Percentage (number)	Percentage (number)	
Issuing formal standalone sustainability report	41 (12)	6 (2)	
Issuing integrated report	3 (1)	0 (0)	
Formal reporting companies utilizing the GRI guidelines	62* (8)	100* (2)	
Issuing annual report	69 (20)	33 (10)	
Disclosing significant amount of quantitative and or qualitative information on website only	7 (2)	10 (3)	
Without significant sustainability reporting	49 (14)	84 (26)	
Niche company with moderate or significant information on own sustainability	10 (3)	3 (1)	
Niche company disclosing very little about own sustainability	7 (2)	33 (10)	

^{*} Percentage is based on 13 medium-size and two small companies that issued formal sustainability reports.

Based on the eight categories, 41% of the medium-size and six percent of the small companies issued formal standalone sustainability reports. Only three percent of the medium-size companies and none of the small companies issued an integrated report that combined in one report complete financial statements and extensive sustainability-related information. The company that issued an integrated report was NovoNordisk (2013), a Danish-based

pharmaceutical company. Integrated reporting is consistent with the Danish Financial Statements Act's requirements for large companies. Some of the companies that issued formal sustainability reports also made a significant amount of information available on their sustainability-related websites.

Sixty-two percent of the medium-size and 100% of the small companies that issued formal sustainability or integrated reports utilized the G3 or G3.1 GRI guidelines. Specifically, seven of the twelve medium-size companies that issued standalone sustainability reports and the one medium-size company that issued an integrated report, as well as both small companies that issued standalone sustainability reports utilized the GRI guidelines. Of those ten companies, four reported consistent with application levels A or A+, three consistent with levels B or B+, and three consistent with levels C or C+. Detailed information about GRI report application levels and scope of reported information is shown in the following section.

Some of the companies that utilized the GRI guidelines also provided disclosures consistent with other guidelines such as ISO Environmental Management Standards, which relate to environmental issues (ISO, n.d.) and the UN Global Compact, which sets guidelines for reporting on ten universally accepted principles relating to human rights, labor, environment, and anti-corruption (UNGC, n.d.).

An additional seven percent of the medium-size and ten percent of the small companies disclosed a considerable amount of selected quantitative and/or qualitative information on their websites only, without providing hard-copy or down-loadable comprehensive reports. Sixty-nine percent of the medium-size and 33% of the small companies issued publicly available annual/10-K reports; many of the small companies were privately held and not required to issue publicly available reports.

Analysis of the companies' annual and 10-K reports showed that while some of them made selected sustainability-related disclosures that related to environmental and social issues the majority did not do so. Moreover, those that made sustainability-related disclosures tended to focus on specific risk factors, such as environmental issues, litigation, and regulatory requirements. An exception was one of the medium-size companies (Roche); its 2012 annual report included more than 30 pages related to responsible business; people; community involvement; and safety, security, health and environment (Roche, 2013).

The majority of the companies made some selected qualitative disclosures on their websites. Such disclosures typically described positive achievements such as donations to community causes, LEEDS certifications, and awards and recognitions. Some companies emphasized their commitment to sustainability, to ethical conduct, conservations, etc. However, 49% of the medium-size and 84% of the small companies did not make significant comprehensive quantitative sustainability disclosures that would facilitate comparability among companies.

Seventeen percent of the medium-size companies and 36% of the small companies provided sustainability-related goods or services to clients. Of those five medium-size and eleven small companies, 60% of the medium-size and only nine percent of the small companies reported a substantial amount of information about their own sustainability-related activities.

Overall, the scope of reported information varied among companies. Some companies provided four-year comparisons, some focused primarily on current year results; and some provided information about long-term sustainability related goals. For example, in addition to providing detailed current year and comparative years' data, one company also provided projected information till the year 2025.

Characteristics of Formally Reporting Companies – Industry

Of the twelve medium-size and two small-size companies that issued formal standalone sustainability reports, six of them (50%) operate in computer-technology related industries – software, hardware, and data storage; two develop and sell toys and games; two manufacture and/or distribute automotives; one provides infra-structure; and one is a pharmaceutical company. In addition, the company that issued an integrated report also is a pharmaceutical company.

Of the two medium-size and three small companies that reported a significant amount of quantitative and qualitative information on their websites only, one provides data storage to clients, one provides lodging, one specializes in department and home searches, and two are in the oil and gas industry.

Commonly Reported Sustainability-Related Issues – GRI Reporting Companies

Based on extensive analysis, the nature, type, and extent of information reported were determined and common reporting trends identified. Overall, companies that issued formal sustainability reports and especially those that applied the GRI framework tended to report information about a broader array of issues and disclosed a greater amount of information than those companies that did not issue formal sustainability reports.

Eight (62%) of the medium-size and both (100%) of the small companies that issued formal sustainability reports utilized the GRI's G3 or G3.1 guidelines. Three application levels are available to choose from – A, B, and C. Application level A requires additional disclosures in all reporting categories and level C requires the least amount of detail. Consistent with the GRI G3 and G3.1 guidelines, the sample companies that utilized the GRI guidelines under either of the three application levels reported information on the following issues:

- Profiles disclosures: (a) strategy and analysis, which consists of statements made by the company's most senior management and includes qualitative disclosures about issues such as key events, failures, and strategic priorities; (b) organizational profile, which includes qualitative information such primary brands, countries of operation, markets served, legal form of organization and quantitative information about the scale of operation in terms of number of employees, net revenue, and number of operations; (c) report perimeters, such as reporting date and cycle, and reporting boundaries. This information is qualitative. Application level B required reporting on all profile disclosures, while level C required reporting on selected disclosures (GRI, FAQs, n.d.).
- Corporate governance, commitments and engagements: includes qualitative information about the organizations governance structure, the basis for identifying stakeholder groups, and materiality; and quantitative information on governance, including personnel information by gender, age, and minority group representation.
- Information about their performance relating to three areas: economic, environmental, and social. In addition, companies that reported consistent with GRI application levels A and B were required to provide information about labor practices and decent work, human rights, society, and product responsibility, which are subcategories of the "social" category. Companies that reported consistent with application level C were required to provide information on a minimum of ten (10) performance indicators, one from each of

the three main categories; application level B required reporting on a minimum of 20 performance indicators; and application level A required reporting on all 63 core performance indicators as well as some sector-specific supplement indicators (GRI, 2011).

Of the eight medium-size companies that reported consistent with the GRI guidelines, three prepared their sustainability reports consistent with application levels A+ or A, which required that they provide information on 63 core performance indicators as well as some sector-specific supplemental indicators, or explained why they were unable to report on a particular indicator. The plus indicates that the reports were externally audited; while its absence means that a company self-assessed the application level. Two of the eight companies prepared their reports consistent with application level B; both of them self-verified. Three of the GRI-consistent reporting companies reported under application levels C or C+. Four of the medium size companies were externally audited.

One of the small-size companies prepared its audited sustainability report consistent with application level A+ and another small company consistent with application level B+. While both companies were classified as "small" in the FORTUNE's "Best Companies to Work For" ratings, they were subsidiaries of or associated with larger global organizations.

Since GRI guidelines for application levels B and C currently provide a considerable degree of flexibility, among sample companies, the number and types of performance indicators for which the companies provide full or partial information varied considerably even within specific application levels. For instance, while application level B requires reporting of at least 20 performance indicators, two of the B-level reporting companies reported on a total of 45 (eight economic, 15 environmental, ten labor practices, three society, and nine product responsibility related) and 28 (two economic, thirteen environmental, seven labor, three human rights, one society, and two product responsibility related), respectively.

Similarly, application level C companies reported information about more than the minimum required ten performance indicators. For example, one of the medium-size companies reported information about 32 performance indicators related to the following categories – two economic, 13 environmental, six labor practices and decent work, five social performance, two customer privacy, and four philanthropy and community engagement. Another C level company reported information about 28 performance indicators – four related to economic performance, 15 environmental, and nine labor practices related. Another C level reporting company provides information on 23 environmental performance indicators in its citizenship report; in addition, the company provided information on nine economic, three human rights, four social, and two product related performance indicators; however, some of the information what reported outside the citizenship (sustainability) report with the location indicated in the company's GRI index.

Commonly Reported Economic Indicators

Commonly reported economic performance indicators presented in the sample companies' GRI-based reports included the following sustainability-related issues:

- Direct economic value generated and distributed (e.g., revenues, operating costs, employee compensation, donations and other community investments)
- Employee coverage under defined benefit pension plans
- Financial implications, risks and opportunities for the company's activities due to climate change
- Policies, practices and proportion of spending related to local suppliers

All of the companies that prepared formal sustainability reports utilizing the GRI framework reported their direct economic value generated; although, some of the companies referred to annual reports for the location of the information.

Commonly Reported Environmental Indicators

Commonly reported environmental performance indicators presented in GRI-based reports included the following sustainability-related issues:

- Materials related: percentage of materials used that are recycled
- Energy related: direct energy consumption; energy saved through efficiency, renewable energy, and other initiatives
- Water related: consumption; percentage of water recycled and reused
- Emissions related: direct and indirect greenhouse emissions; initiatives to reduce greenhouse emissions
- Waste and recycling-related information: total waste by type, disposal methods, significant spills
- Product and services related: initiatives to reduce impact of products and services
- Compliance with environmental regulations and fines related to environmental issues

All companies that utilized the GRI framework consistent with any of the three application levels reported information about their direct energy consumption, energy saved due to conservation and efficiency, total direct and indirect greenhouse gas emissions by weight; and total weight of waste by type and disposal method.

Commonly Reported Social - Labor Practice Indicators

Social performance indicators consisted of four sub-categories – labor-related, human rights, society, and product responsibility. While some of the companies did not report on labor indictors, most of them did. Commonly reported labor practice related performance indicators included:

- Total work force by employment type, employee contract, and region
- Employee turn-over by age, gender and region
- Benefits provided to full-time employees
- Percentage covered by bargaining agreement
- Training by gender and employee category
- Life-long learning programs
- Occupational related injury rates, fatalities, and absentees

Even though C level reporting companies are not required to report their performance on labor practices, two of the companies chose to report on various labor-related performance indicators. Both companies reported information about their total workforce by employment type, employment contract, region, and gender; new hires and employee turnover by age, gender and region; benefits provided to part and full time employees; injury rates, occupational related deceases, fatalities, and absentees by gender and region; and programs for skills management and lifelong learning.

Commonly Reported Social - Society Indicators

Commonly reported society-related indicators addressed issues related to companies' and employees' community engagement; humanitarian efforts; and anti-corruption policies, legal actions, and compliance with policies.

Commonly Reported Social -- Product Responsibility Including Privacy

The companies that reported consistent with application level A were required to report information related to nine (9) aspects of product responsibility. In addition, some of the B-level reporting companies also provided information on product responsibility. For example, one of the B-level companies reported on all nine indicators and another reported on two indicators; in addition, two of the C application level reporting companies reported on two product responsibility indicators. The two most frequently reported indicators related to product life cycle as related to health and safety, customer satisfaction, and customer complaints with respect to data security and information privacy; and monetary value of fines related to non-compliance with laws and regulations.

Information Commonly Reported by Companies Issuing Non-GRI Sustainability Reports

Five of the medium-size companies that issued formal sustainability reports did not utilize the GRI framework. The scope, nature and type of information reported by those companies varied significantly. Some of their reports were quite detailed, addressing environmental, social, and governance issues; and included current year as well as comparative year information regarding issues such as energy saved through use of energy efficient equipment, reduction in water use, reduction in CO₂ emissions, the results of recycling efforts, donations to specific not-for-profit organizations, and the composition of personnel. Some of the reports provided a significant amount of quantitative information focusing primarily on specific areas, such as environmental issues or community and employee wellbeing; others were primarily qualitative and descriptive in nature and tended to focus on areas that the company excelled at.

Non-GRI companies consistently reported information about:

- Employee-related issues and benefits and wellness programs
- Corporate awards and distinctions
- Community engagement and donations
- Their commitment to reducing greenhouse gas emissions; related programs and initiatives
- Water usage and management
- Corporate governance
- Ethical principles

Some of this information tended to be reported outside the sustainability report. In addition, some of the reports referred to the Dow Jones Sustainability Index and the Carbon Disclosure Project. While the nature, type and extent of information provided in Non-GRI referenced reports varied considerably, some of the companies provided a wealth of information about issues that frequently are reported under the GRI guidelines. However, more variability existed among the reports and in some cases companies issued reports at varying intervals. For example, one of the companies issued a detailed sustainability 80+ page report in 2010 followed by its most current report consisting of a 25-page update in 2011. The company provided four-

year comparative information that addresses issues such as its economic performance; product related performance, such as number of violations, factory seal, and sourcing; environment, such as greenhouse gas emission, energy consumption, CO₂ emissions, water consumption, and waste; employee-related performance, such as diversity, ethnicity and minorities, training, unionization; community-related performance, such as financial support, donations, employee volunteer hours; and awards and recognition.

Another company issued a 16-page report focuses on greenhouse gas emissions, green reduction, electricity use, water use, waste, supply chain, employee engagement; products; and sustainability reporting. Another entity issues a report exceeding 40 pages report that focuses on carbon foot print, environmental initiatives, and security and privacy.

Information Commonly Reported by Companies without Formal Sustainability Reports

The scope, nature and type of information reported by companies that did not issue formal sustainability reports and instead reported information only on their company website varied significantly. While a few companies disclosed significant qualitative information especially on CO_2 emissions and water usage, most companies tended to provide primarily descriptive qualitative information. Reported information tended to be on selected areas and selected aspects within those areas. Overall, companies tended to focus heavily on their positive achievements related to selected sustainability-related issues.

Commonly reported information disclosed by those companies related to:

- Community involvement and philanthropic activities, both with respect to the company and its employees; public health and education.
- Awards and designations achieved by the company (e.g., LEEDS certification, industry recognition, etc.)
- References to company's code of ethics
- Employee wellness programs
- Climate change, and especially CO₂ emissions information
- Recycling efforts
- Waste management
- Water usage

Some of the companies did not provide quantitative sustainability-related information; a number of them were health-care oriented organizations. While some of these organizations disclosed information about their community involvement including community health education and health screening programs, they generally did not provide information about environmentally-oriented issues such as waste disposal, energy use and conservation.

SUMMARY AND IMPLICATIONS

Sustainability reporting varied significantly among the small and medium-size sample companies. Less than half of the medium-size and only two of the small companies issued formal sustainability or integrated reports; of these, 62% of the medium-size and all of the small companies utilized the GRI framework. With respect to utilization of the GRI framework, the findings of this study are consistent with those of other studies that focus on large companies.

Companies that utilized the GRI reporting guidelines tended to report a greater amount of detailed quantitative information than those companies that did not utilize the global reporting

guidelines. Overall, formally reporting companies tended to provide more detailed information than companies that did not issue a formal report. In addition, the use of the GRI framework and the associated GRI indexing system enhanced the comparability among the reports. However, even among GRI-referenced reports, significant variations were noted since companies may choose from among three application levels and, within a particular application level, may choose from among a number of performance indicators.

Companies that disclosed only selected information on their websites and did not issue formal reports tended to focus on specific issues and emphasize positive results; in some cases, reporting appeared to be largely promotional in nature. Furthermore, while 60% of the GRI-referenced reports were audited, non-GRI referenced sustainability information typically was unaudited. Consistent with the spirit of sustainability, several of the formal reports were available solely in a down-loadable format; some were structured as website links.

In addition, a considerable percentage of the companies did not make significant quantitative disclosures about their sustainability-related activities. Some non-GRI reporting companies provide sustainability-related information in various information sources, which may make it more cumbersome for stakeholders seeking comprehensive knowledge. Integrated reporting could help address this issue and benefit not only information users, but also information preparers.

Limitations

The relatively small sample size limits testing for statistically significant variables that may influence sustainability reporting. Furthermore, some of the private companies did not issue annual reports, which limits testing for related financial measures. In addition, the sample selected deals with companies that are highly rated by employees, which may increase the likelihood of companies reporting about their related sustainability efforts. The study should be repeated with a larger sample from a diverse population of companies.

Implications

Because of the variability in reporting, comparability among companies is difficult. Consistent application of a common framework, such as the GRI or the currently being developed SASB standards may greatly enhance comparability and be beneficial to information users. Opportunities exist for companies to further enhance their reporting, for meeting the needs of their stakeholders, and for better understanding their own internal operations and their comprehensive effect on the external environment. Companies that provide sustainability-related goods or services may especially benefit from reporting about their own sustainability-related activities. Furthermore, opportunities may exist for non-reporting companies that voluntary report detailed and comprehensive information about their sustainability-related activities.

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THE VALUE OF GRADUATE EDUCATION TO PROMOTE SUSTAINABILITY IN HEALTHCARE ORGANIZATIONS

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ABSTRACT

Most healthcare systems continue to increase the price of their services while delivering lower quality services to their customers. Unfortunately, this strategy is no longer capable of providing sustainability to the vast majority of healthcare providers. These healthcare systems seem to be unaware of the changes that are occurring in the healthcare environment and making matters worse most of their employees are lacking the business skills necessary to respond to these environmental changes. Many of our healthcare systems have developed bureaucratic rules and regulations that stifles creativity thus eliminating the ability to rapidly respond to a changing business environment. They are unable to capitalize on the many opportunities that present themselves because of the much needed reform efforts found in healthcare today.

Kotter (2014) points out that in order to take advantage of market opportunities mature organizations require the creation of a dual operating system capable of creating a sense of urgency about responding to external conditions. This would entail the availability of a group of empowered entrepreneurs who work for the healthcare system attempting to provide disruptive innovation within the large health care delivery system.

This study of a large healthcare delivery system attempted to discover if graduate education in healthcare administration significantly affected employees' awareness of their changing environment and preparedness of their business acumen to exploit these changes. The findings in this paper clearly advocate for graduate education for healthcare employees in order to prepare for organizational challenges.

INTRODUCTION

It has been known for years that the major problems found in healthcare are a direct result of the rising cost and poor quality of American healthcare delivery systems. In order to address these problems healthcare providers must first understand the problems they face and then develop the business skills that are necessary to improve the efficiency and quality of healthcare services to their consumers.

Chopra (2014) points out that the majority of root causes of environmental change and subsequent business downturns are not only identifiable but preventable. The lack of recognition is a direct result of top management's inability to understand the need for constant innovation. Kotter (2014) argues that this is a very dangerous course to follow for any business in today's turbulent environment. In order to remain in business for the long-term the business must have a strategy in place to rapidly respond to the environmental realities and then be able to exploit the opportunities that may become available.

Cutler (2014) points out that there is a need to better organize groups of health care providers to improve health outcomes at a lower price. Kotter (2014) proposes the development of the dual operating system that could provide the much needed creativity and innovation that is so necessary to deal with a changing business environment. There would be a combination of a group of empowered entrepreneurs attempting to provide innovation within the large health care delivery system. In essence these entrepreneurs using their dual operating system would be functioning as a start up with the power to take risk in their attempt at improvement. There is a tremendous need for agility and creativity along with a sense of urgency required to take advantage of the many opportunities that present themselves because of much needed reform efforts found in the way health care services are being delivered to the American population. In order for this strategy to be successful employees must be aware of upcoming environmental changes and have the business knowledge that is necessary to exploit these changes.

A potential approach to prepare a healthcare workforce to become more entrepreneurial is to encourage employees to pursue graduate education in business or healthcare management/administration. A quality healthcare administration or business graduate program should expose employees to the most recent trends in the healthcare industry as well as further develop their employees' business skills. In response to the growing business complexity of the medical profession (Miron-Shatz, Shatz, Becker, Patel & Eysenbach, 2014) there are over 50 medical schools in the United States today that have a MD / MBA program to help prepare physicians for the workplace. Similarly, there are articles that promote the value of a graduate business degree to help medical professionals be prepared to improve the efficiency and profitability of their organizations (e.g., Ornstein, 2010). Research on the value of graduate business or healthcare administration to physicians however is limited. In one study a survey was administered to physicians and other healthcare professionals that just completed a graduate business program. The survey did reveal participant satisfaction with the program right after when the program was finished. No comparison groups were included in the study (Young, Hough & Peskin, 2003). This investigation utilizes a comparison group within a large healthcare organization to determine the extent to which graduate education influences employees on their perceived business acumen and knowledge of healthcare trends. Since physicians often leave primary care positions to move into upper-level administration, it is important to determine whether or not graduate business or healthcare programs have a significant impact on those participants compared to nonparticipants. If there are no substantial differences in the business skills or knowledge, then the value of offering this benefit is highly questionable.

- H1 Healthcare employees with a graduate education in business or healthcare are more knowledgeable of current healthcare trends than employees without this education.
- H2 Healthcare employees with a graduate education in business or healthcare believe they have stronger business acumen than employees without this education.

METHODS

A large healthcare system in the northeast was surveyed to discover their employees' knowledge of current and future environmental trends in the healthcare sector along with their level of business acumen. The survey was administered via survey monkey to all 4200 employees of this organization. 783 employees responded to this survey for a response rate of 18.6%.

This survey consisted of two sections pertaining to the above topics along with a third section on demographic information concerning the respondents. The first section of the survey contained 9 items pertaining to key business components (e.g., tax implications, human resources, legal, government). The second section asked respondents about their familiarity with the 10 most critical trends (e.g., use of analytics, care for the mentally ill, PPACA) in healthcare (Emanuel, 2014). The final section pertained to five demographic items (age, sex, tenure, education & full-time status).

RESULTS

The respondents were primarily female (70%) with an average age just under 50. A slight majority (51%) of these employees worked at this organization for over 10 years and about 90% are full-time employees. Only 12.5% of these employees have any type of graduate education in business or healthcare administration.

The internal consistency reliability of the 9-item scale on business acumen was .94, whereas the 10-item scale for healthcare trends had an internal consistency reliability of .95. Both of these coefficients are quite impressive.

The survey data was broken down based upon whether or not the respondent had completed any type of graduate education in business or healthcare administration. Demographic comparisons were made between those with a graduate education and those without. The only statistically significant difference (\underline{p} <.01) based on this difference was that there was more male employees with a graduate education (19%) than female employees with a graduate education (11%). When this analysis was done for physicians only, there were no statistically significant differences based upon this classification.

Table 1 below displays mean differences across all employees on the two scales. For every single item on both scales employees with a graduate certificate or degree reported higher business acumen and knowledge of health care trends. Support for both hypotheses are thus indicated in these tables.

Table 2 presents this same analysis for physicians only. The results were almost as substantial. In six of the nine business areas physicians with a graduate degree reported statistically higher scores. Similarly, for healthcare trends physicians with a graduate certificate/degree reported considerably higher knowledge.

Table 1			
Mean differences across all employees with & without graduate certificate/degree in HCA			
	No grad certificate or	Grad certificate or grad	p-value
	degree	degree	
	(n = 617)	(n = 88)	
Business Acumen:			
1) Legal	2.18	2.88	.000
2) Tax	1.89	2.35	.000
3) HR	2.49	3.25	.000
4) Marketing	2.46	3.24	.000
5) Management	2.58	3.52	.000
6) Revenue	2.37	3.31	.000
7) Expense	2.42	3.34	.000
8) Patient	3.14	3.65	.000
9) Government	2.18	2.75	.000
TOTAL score	21.62	28.99	.000

Health care trends:			
1) Use of analytics in	1.97	2.69	.000
healthcare decision-making			
2) Care for the mentally ill	1.95	2.41	.000
3) Treatment of chronic illness	2.33	2.80	.000
4) New healthcare technologies	2.27	2.97	.000
5) Rise of specialty clinics	2.05	2.71	.000
6) Changes in employer	2.20	2.93	.000
healthcare programs			
7) Impact of the PPACA	2.65	3.22	.000
8) Implications of inflation on	2.52	3.21	.000
healthcare services			
9) Changes in medical	2.25	2.69	.000
education			
10) Changes in the healthcare	2.49	3.02	.000
workforce			
TOTAL score	22.71	28.99	.000

	Table 2		
Mean differences between physi		aduate certificate/degree in	HCA
	No grad certificate/	Grad certificate or grad	p-value
	degree	degree	
	(n = 35)	(n = 13)	
Business Acumen:			
1) Legal	2.18	2.88	.003
2) Tax	1.89	2.35	.106
3) HR	2.49	3.25	.023
4) Marketing	2.46	3.24	.032
5) Management	2.58	3.52	.031
6) Revenue	2.37	3.31	.037
7) Expense	2.42	3.34	.009
8) Patient	3.14	3.65	.078
9) Government	2.18	2.75	.134
TOTAL score	21.62	28.99	.007
Health care trends:			
1) Use of analytics in	1.97	2.69	
healthcare decision-making			.010
2) Care for the mentally ill	1.95	2.41	.193
3) Treatment of chronic illness	2.33	2.80	.092
4) New healthcare technologies	2.27	2.97	.046
5) Rise of specialty clinics	2.05	2.71	.030
6) Changes in employer	2.20	2.93	.010
healthcare programs			
7) Impact of the PPACA	2.65	3.22	.018
8) Implications of inflation on	2.52	3.21	.070
healthcare services			
9) Changes in medical	2.25	2.69	.654
education			
10) Changes in the healthcare	2.49	3.02	.047
workforce			
TOTAL score	22.71	28.99	.019

DISCUSSION

There is growing evidence of the need for investment in the preparation of human capital for the changes that are occurring in the delivery of healthcare services by American healthcare providers. This investment requires preparing employees with environmental information along with the requisite business skills to deal with an uncertain and ever changing healthcare environment.

The results of this study revealed that individuals who had received business education training were more aware of the changing healthcare environment and better prepared to exploit the opportunities that were made available by these changes. Healthcare employers should strongly consider this initiative to develop their workforce for the future.

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COMPARISON OF TAX/LEGAL RESEARCH SERVICES

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ABSTRACT

The main goals of tax research include answering tax questions and communicating information. Additionally, the tax researcher needs to work efficiently and effectively. This paper introduces commercial tax services as tools to conduct efficient and effective tax research. Moreover, this paper discusses specific commercial services including RIA Checkpoint (RIA), CCH IntelliConnect (CCH), Bloomberg BNA U.S. Income Portfolios Library, Lexis-Nexis, LexisNexis Academic, and Westlaw. Karlin (2009) cites advantages of tax research services including libraries, searches, and links.

INTRODUCTION

Magro and Nutter (2012) studied experience in making tax decisions and found that "lack of experience is a primary concern of corporate tax executives" (p. 292). They stated "the tax function is a leading cause of material weaknesses and restatements under Sarbanes-Oxley and tax executives cite increasing difficulty in hiring and retaining qualified professionals" (p. 291). In a survey of accounting firms, communication was determined to give an accounting firm a competitive edge (Blanthorne, Bhamornsiri, & Guinn, 2005). Communication ranked second out of six factors for promotion (Blanthorne, et al., 2005). The main goals of tax research include answering tax questions and communicating resulting information (Raabe, Whittenburg, Sanders, & Sawyers, 2012; Rupert, Pope, & Anderson, 2015). Additionally, the tax researcher needs to work efficiently and effectively. This paper describes commercial tax services as tools to conduct efficient and effective tax research. Moreover, this paper discusses specific commercial services including RIA Checkpoint (RIA), CCH IntelliConnect (CCH), Bloomberg BNA U.S. Income Portfolios Library (BNA), Lexis-Nexis, LexisNexis Academic, and Westlaw. Karlin (2009) cites advantages of tax research services including libraries, searches, and links.

ETHICS OF USING COMMERCIAL TAX SERVICES

Using commercial services efficiently and effectively allows a tax researcher to find solutions to problematic issues in taxation (Karlin, 2009; Needleman, 2013; Raabe et al., 2012). Commercial services typically lead researchers to consult primary and secondary sources within one website (Karlin, 2009; Raabe et al., 2012). Primary sources include tax laws, regulations, court cases, and treaties. Primary sources have a high level of authority and can be relied on by tax researchers in making determinations of proper treatment of issues. Secondary sources include commentary, publisher interpretations, journal articles, and textbooks. Secondary sources are useful in understanding issues or analyzing how other taxpayers may be treating a situation,

but do not have binding or precedential authority (Karlin, 2009; Raabe et al., 2012). Moreover, all necessary supporting information needs to be incorporated into communications (Raabe et al., 2012). Raabe, Whittenburg, Sanders, and Sawyers (2012) noted that limiting tax research to just commentary (secondary source) is unethical. Such practice would also show a lack of due diligence. The tax researcher should determine and evaluate primary sources and recent changes. Fortunately, commercial tax services link directly to primary sources (Catanach, & Rhoades-Catanach, 2013; Karlin, 2009; Raabe et al., 2012). Raabe et al. (2012) warned, "professional judgment is required because the controlling law is imprecise and can be interpreted differently by the taxpayer, the IRS, and the courts" (p. 194).

CATEGORIES OF COMMERCIAL TAX SERVICES

Two categories of commercial tax services include annotation and topical (Catanach, & Rhoades-Catanach, 2013; Karlin, 2009; Raabe et al., 2012). Some authors refer to annotated tax services as code-oriented (Karlin, 2009). Compilations are another name for annotated tax services (Raabe et al., 2012). The grouping of annotations or code-oriented classifications revolves around the Internal Revenue Code (IRC) sections (Karlin, 2009; Raabe et al., 2012). These authors noted that annotations provide summaries of the code by the tax service editorial staff. Additionally, annotations summarize "related court cases and administrative rulings" (Raabe et al., 2012, p. 192).

Topical tax services report results of tax research projects with an integrated approach (Karlin, 2009; Raabe et al., 2012). These authors discussed that topical tax services assist tax researchers by bringing together information grouped by relevant code sections. Topical tax services, compared to annotations, have longer explanations, are easier to comprehend, and are a good starting point for the tax researcher (Karlin, 2009). Karlin (2009) pointed out that the less familiar a researcher is about a code section, the more benefit there is to be gained by using topical tax services. However, some authors noted that "the distinction between the two methods was important in a paper environment, but now, with the advent of keyword searches, it's less significant" (Catanach, & Rhoades-Catanach, 2013, para. 6). It is important to note that a topical tax service may not provide full coverage of all code sections, so if support is not located within a topical tax service, the researcher needs to expand his or her search through code-oriented services.

As the tax researcher prepares to conduct a search, the following decision tree might be helpful to keep in mind. If a particular code section, ruling, or tax case is known, a citator service will provide a listing of other sources that have cited the same provision. This is often a good starting place for a research project. Then, when delving into further research, the researcher can proceed either with sources that are organized around particular legal provisions, such as Internal Revenue Code sections, or by the topical subject matter of the research issue. The discussion below introduces various tax research tools that will aid the tax researcher.

CITATORS

Tax researchers must deal with volumes of information in a constantly changing tax world (Catanach, & Rhoades-Catanach, 2013; Karlin, 2009; Raabe et al., 2012). These authors discussed the ability of a tax researcher to employ a citator to trace the origins and changes of legal sources. In addition, citators increase efficiency in the tax research process by identifying the current legal standing of a particular provision. The citator lists the "cases, revenue rulings and revenue procedures that have ever cited a ruling" (Karlin, 2009, p. 130). Some limitations of citators are potentially not referencing all documents related to the tax question and not effectively guiding the researcher to other resources (Karlin, 2009; Raabe et al., 2012). However, Raabe et al. (2012) cautioned "the citator is a vital tool in the research process…only careless or improperly trained practitioners rely on legal sources that have not been checked through a citator" (p. 243). Commerce Clearing House (CCH), Research Institute of America (RIA), LexisNexis, through Shepard's, and Westlaw, through KeyCite, all offer citators (Raabe et al., 2012).

RIA CHECKPOINT

The Research Institute of America sponsors RIA Checkpoint (Karlin, 2009; Needleman, 2013; Raabe et al., 2012). RIA began in 1935 as a research source (Williams, 2014). RIA Checkpoint provides the tax researcher with keyword searches in both technical and natural language (Karlin, 2009; Rupert et al., 2015). Other search features include citation and content searching (Raabe et al., 2012).

Features of RIA Checkpoint include the Federal Tax Coordinator (FTC), a value added topical research tool (Karlin, 2009; Raabe et al., 2012). The FTC highlights the search keyword, provides the title, and includes editorial comments called observations (Raabe et al., 2012). The FTC employs hyperlinks to locate primary sources (Karlin, 2009; Raabe et al., 2012). Tax researchers cite primary sources after evaluation; however, "paragraph numbers of the FTC should **not** be cited as support by a tax professional" (Raabe et al., 2012, p. 198, original emphasis). Another valuable tool in RIA Checkpoint is the United States Tax Reporter (USTR) (Catanach, & Rhoades-Catanach, 2013; Raabe et al., 2012). The USTR annotates primary tax laws and regulations, and explains tax cases and other rulings (Hoffman, Raabe, Maloney, Young, & Smith, 2015; Raabe et al., 2012). Such a source is useful for honing in on specific code sections. A useful feature of the USTR is its New Matter or Recent Developments volume that provides a reference table for new information not yet included in the main data set (Karlin, 2009). Additionally, the USTR contains a topical source, Federal Tax Coordinator 2d (Catanach, & Rhoades-Catanach, 2013; Hoffman et al., 2015). Topical searches are more applicable for retrieving multiple code sections. RIA Checkpoint also provides well-respected journals known as Warren, Gorham & Lamont (WG&L) (2013; Karlin, 2009; Raabe et al., 2012; Williams, 2014). These journals originated in 1961 (Williams, 2014). Many entities, corporations, firms, and even the Supreme Court use these journals as secondary tax research resources (Karlin, 2009; Williams, 2014).

CCH INTELLICONNECT

Raabe et al. (2012) compares CCH IntelliConnect (CCH) to RIA Checkpoint. These authors noted that CCH is more streamlined than RIA. All CCH databases employ keyword searching. Additionally, CCH has a thesaurus in the background of the search function (Catanach, & Rhoades-Catanach, 2013; Raabe et al., 2012). CCH also has the feature of date limitations for searches (Raabe et al., 2012). In contrast, RIA Checkpoint has a date filter, but it is limited and does not apply to all types of searches. CCH uses filters to categorize results. For example, one filter, Results by Library, finds editorial information. The Documents Type filter brings forth journals, annotations, and other resources (Raabe et al., 2012). CCH has a resource, Tax Research Consultant (TRC) that mirrors RIA's Federal Tax Coordinator. CCH's Standard Federal Income Tax Reporter (SFITR) is a code section-based tool that resembles the United Sates Tax Reporter. Like RIA, CCH has journals and other secondary resources (Raabe et al., 2012). CCH and RIA both issue daily updates (Needleman, 2013). The Master Tax Guide contained in CCH is an excellent source for answering basic tax questions (Catanach, & Rhoades-Catanach, 2013, 2013; Raabe et al., 2012). Because it allows the researcher to view the tax code by year, CCH provides tax archives that assist professionals in audit situations (Raabe et al., 2012). Finally, CCH utilizes citation templates for locating information when citation information is lacking (Raabe et al., 2012).

BNA PORTFOLIOS

BNA includes over 200 "portfolios" which discuss, in depth, specific tax issues (Karlin, 2009; Raabe et al., 2012). "The portfolios are unique because they are written for professionals, by professionals" (Raabe et al., 2012, p. 209). The strength of BNA is in its topic oriented approach, which users can access through a search or table of contents by topic (Karlin, 2009; Raabe et al., 2012). Portfolios can be described as small textbooks covering specific issues. For any included topic, all relevant code sections are discussed, reducing the chance that an exception or an appropriate code section is not located. Some examples of portfolio topics include attribution rules, bankruptcy, corporate reorganizations, and disregarded entities. BNA portfolios are written by identified experts for each topic and provide well-integrated tax planning discussions. A subscription to BNA is often purchased as an addition to one of the code-oriented services such as CCH, RIA, Westlaw, and LexisNexis. Although it is topic oriented, the portfolios are completely cited. The relevant full texts of primary sources cited are hyperlinked so that they can be accessed directly (Karlin, 2009; Raabe et al., 2012).

Lexis relates to tax and legal tools while Nexis provides news-oriented information (Raabe et al., 2012). The Tax Center in LexisNexis facilitates tax professionals in research. Geared to attorneys, the Tax Center is not as efficient as RIA or CCH (Altshuler, 2001; Raabe et al., 2012). However, Lexis provides Auto-Cite which is an excellent citation service (Altshuler, 2001). Moreover, LexisNexis provides information about specific firms (Catanach, & Rhoades-Catanach, 2013). The "LexisNexis Dossier can deliver profiles on approximately 35 million companies as well as on 1,000 industries" (Catanach, & Rhoades-Catanach, 2013, para. 32).

LexisNexis has the following tax services: Federal Code Reporter, and Tax Advisor and Federal Topical (Raabe et al., 2012). Like RIA and CCH, LexisNexis has primary sources and secondary analytical information. The keyword search is much like RIA using KeyWord in Context (KWIC). Another feature of LexisNexis is Get a Document that will retrieve documents by entering recognized citation formats (Raabe et al., 2012).

LexisNexis Academic, provided by many universities in their academic libraries, offers a less detailed version (Raabe et al., 2012). The tax research function retrieves primary sources, journals, and other informational sources. Like other services, LexisNexis Academic employs keywords searching in natural language, or KWIC terms (Raabe et al., 2012).

WESTLAW

Because Westlaw markets mainly to attorneys, it is not as prevalent as RIA and CCH in accounting tax research (Raabe et al., 2012). Tax firms employing attorneys often use Westlaw (Raabe et al., 2012). Westlaw provides KeyCite, which is an excellent citator (Altshuler, 2001; Raabe et al., 2012). Westlaw contains an extensive database providing access to RIA, CCH, "law reviews, legal texts, various tax news services, and the WG&L treatises, manuals, journals, and newsletters" (Raabe et al., 2012, p. 211). Because it provides such a wide array of entry points for database searching, Westlaw designed a new research product, WestlawNext, which allows researchers to commence a search without having to select a particular database first (Knapp & Willey, 2013; Raabe et al., 2012). A WestlawNext search mirrors, or has the same "feel," as a Google search because it provides broader search capabilities, allowing the researcher to locate relevant law with natural language searching, which is easier to use than technical based search vehicles, that, for example, require Boolean logic. Because Westlaw incorporates so many databases, a useful feature is the Database Wizard (Raabe et al., 2012). The Westlaw Wizard guides tax researchers by organizing a subject using two or fewer databases (Westlaw, 2009). Westlaw includes a thesaurus and other types of search tools to make creating pertinent searches more convenient (Raabe et al., 2012). Adding the tax tab enables tax researchers to locate tax materials and databases. Results Plus reveals to the researcher other search strategies to consider. Another feature is the West Key Numbering System (Key Number), an organizational tool, which allows a researcher to "perform either a keyword search or drill down through the list of topics" (p. 216). KeySearch works with Key Number to locate material when the researcher is not familiar with a certain area of the tax code (Raabe et al., 2012).

CONCLUSION

A tax researcher typically is familiar with many tools to locate applicable authority to support a conclusion or position for a tax issue. Depending on where the researchers work, they may not have access to more than one of the major services or even a lesser well known service that this paper did not discuss. In case tax professionals change jobs, or the employer switches the services it purchases, or the researchers themselves change the service they have access to, they should be familiar with the major options. They should also be aware of the capabilities and

relative strengths and weaknesses of the major services. Since the inception of the major tax research services, when they were paper versions filling many binders, the online services are more convenient and powerful, but there still is not just one accepted "best" choice for research.

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CAPITAL BUDGETING PRINCIPLES: BRIDGING THEORY AND PRACTICE

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ABSTRACT

One of the important qualities that accrediting bodies, e.g., the AACSB are looking for in business schools is learning outcomes that relate theory with practice. In fact, they encourage business schools to include pedagogical tools in the curriculum that foster practical applications of complex theoretical concepts, thereby making them intuitive and somewhat easier to grasp by students. Additionally, prospective employers, college professors, and students themselves are interested in learning valuable skills such as conducting research, team building, leadership, and interdependence that they can take with them to their job. This paper describes a capital budgeting project that is a real world simulation of a new business startup. It allows students to acquire the valuable skills mentioned above. The proposed project is suitable for graduate (MBA) and upper-level undergraduate courses. The project has been assigned in an MBA program with great success in the core corporate finance. But it can also be amended and utilized in the capstone strategic management course. For undergraduate finance students, this project can be assigned in the second (intermediate) finance course. The project is particularly appealing to non-traditional business students, who often desire to establish their own firms. The project directs their focus on the achievement and profitability of their future dreams while applying in practice what they learn in theory.

I. INTRODUCTION

Social scientists and academicians have stressed offering students multiple techniques of pedagogy for better learning outcomes. These techniques include one-minute papers, more detailed research papers, simulations, power point presentations, and real-world projects among others. Research has shown that generation-X actually prefers experiential learning to the more traditional lecture-based pedagogy (Bale and Dudney, 2000). Frequently professors spend a lot of time and effort searching for projects to supplement their lectures to enrich their coursework. The accrediting bodies encourage schools to include such pedagogical tools that bridge theory with practice. While instructors have always desired such tools, lately there is an increased demand from employers and student graduates to obtain these valuable hands-on experiences by simulating the real world before entering it.

While useful to both graduate and undergraduate students, practical learning experience is more important for the former group. This paper describes a project that can be used in upper level undergraduate finance (and strategic management) courses, but is particularly geared towards graduate students. The project requires students to apply financial analysis to the startup of a small company. This project has already been assigned successfully in MBA (and undergraduate) courses at a business school for a number of years with good results. Since most of the students enrolled in the core MBA corporate finance course are classified as non-traditional, they frequently have a dream of establishing their own company, of being

entrepreneurs. This project provides them the opportunity to apply theoretical concepts and focus on the costs and benefits of their future plans.

Viewing various business functions on a small scale provides insight in understanding the interactions among functions in larger, established firms. While this paper involves the application of financial analysis, the project can be modified for any other business discipline, such as management or marketing. Over the course of study in an MBA program, it can also be used as a continuing project, adding facets to the study in each discipline. It may be modifi67ed to provide an examination of the practicalities in setting up businesses for other professionals, such as medical offices, engineering firms, etc. Its main benefit for the student is to encourage the disciplined thought and planning required in establishing a successful business.

The rest of the paper is organized as follows. Section II reviews the relevant literature. Section III discusses some desirable attributes of a class project assignment. Section IV explains the project in detail. Based upon procedural logic, Section IV is further divided into four sequential sub-sections. Section V summarizes the paper and provides some concluding remarks.

II. LITERATURE REVIEW

In a classic study on how to frame classroom learning experiences that model necessary attributes for the foundations of success, Bruner *et al* (1999) found the following as important:

- 1. Select cases that employ, exercise or explore a tool or concept
- 2. Highlight the dilemmas of the decision maker
- 3. Set the numbers and critique them
- 4. Embrace uncertainty
- 5. Demand the action recommendations arising from analysis
- 6. Look for unintended consequences
- 7. Explore opportunities for further work

If a project possesses several of the above attributes, it is considered good. Remarkably, the project explained in this paper meets most of the above criteria.

Bale and Dudney (2000) surveyed students to research their preferred mode of learning. They find from their survey results that for Generation X students (born between 1961 and 1981) "hybrid" teaching models incorporating both andragogy (self-directed, self-motivated) and pedagogy methods are most effective. Making reference to another related study they go on to conclude that Generation X wants to see value and relevance in education, otherwise they are not motivated to learn new skills. They prefer experiential learning using as many of the five senses as possible (Caudron 1997). The startup project explained here is an example of hybrid teaching model that incorporates both andragogy and pedagogy.

Deeter-Schmelz, Kennedy, and Ramsey (2002) conclude that team projects play a vital role in modern pedagogy. Moreover, as team projects become even more common in business courses, an increased understanding of factors contributing to team effectiveness is necessary for instructors to assist students in realizing the potential benefits of this pedagogical tool. Their results support the positive and direct role of cohesion as an input variable on teamwork. Ashraf (2004) finds that in business schools across the United States, one of the most common pedagogical tools is the use of group projects. "Passive" instruction (i.e., lecture only) is

considered to be an inferior mode of teaching. He highly recommends the use of group-based projects as pedagogical tools. Since we suggest that our project be preferably given as a team assignment, recommendations of both Deeter-Schmelz *et al* (2002) and Ashraf (2004) are met.

A simulation, like any pedagogical tool, must be evaluated in terms of its effectiveness in achieving course objectives. In a study, Chapman and Sorge (1999) investigate how well a particular simulation does in achieving course objectives and compare its performance to the textbook and papers used in the course. They find that compared to the textbook and research papers, students consistently gave simulation the highest ratings. In another study, Olson *et al* (2006) discuss and encourage the use of simulation as a pedagogical tool. While their simulation is developed for Eastern European transition economies, it is applicable to any pedagogical learning situation, specifically to the general operations of the firm at the microeconomic level of decision-making. Our project conforms to both studies, Chapman and Sorge and Olson *et al*.

While most of the above studies pertain to general education and business courses, there is some literature that is specifically relevant to finance courses. For example, Gurnani (1984) extensively reviews and compares capital budgeting concepts as advocated in theory with the methods employed by industry. Capital budgeting is an interdisciplinary function, involving diverse areas such as engineering, finance, and management. The ability of a firm to make sound decisions in this area rests not only on the theoretical techniques employed but also on the judgment, intuition, and creativity of the analysts and decision makers. He claims that the academic literature has concentrated heavily on developing and refining quantitative evaluation criteria, methods of measuring return, risk analysis techniques, and procedural aspects of capital investment decision making. However, academic research has been criticized because it tends to be essentially concerned with accuracy of analysis, sophistication of methodology, and improving conditions in a laboratory setting without regard to the realities of corporate decision making. One reason for the gap is a lack of bridging theory with practice at the school level. We feel that this project is the perfect bridge.

Benton Gup (1994) surveys academics and practitioners and ranks those finance concepts considered most important for students to acquire. The academics rank time value of money capital budgeting, CAPM, capital structure, and valuation as the top five financial concepts for this purpose. It is striking that all five are included to some degree in the project discussed in this paper. The practitioners ranking excluded CAPM and valuation but included accounting and cost of capital. This project requires a critical understanding of the cost of capital concept.

In what has to be one of the most comprehensive and impressive studies in corporate finance, Harvey and Graham (2001) sampled 4440 firms receiving responses from 392 chief financial officers (CFO's) to examine the proverbial *bridge* between theory and practice. Their findings are both reassuring and surprising. It is reassuring to them that NPV is dramatically more important now as a project evaluation method than it was 10 or 20 years ago. The CAPM is also widely used in the real corporate world. However, they find it surprising that more than half of the respondents would use their firm's overall discount rate to evaluate an investment in an overseas market, even though the investment likely has different risk attributes than the overall firm. This indicates that practitioners might not apply the CAPM or NPV rule correctly, perhaps indicating a need for a better bridge between theory and practice. A class assignment such as proposed in this paper would be useful to reinforce this bridge.

Weaver and Michelson (2004) suggest a project that could accompany a corporate finance course to enhance the learning of theoretical concepts. It is a simple Excel model that

provides measures of the standard deviation of forecasted internal rate of return (IRR) given traditional data inputs such as annual cash flows, terminal values and equity. The model first calculates IRR using traditional discounted cash flow methods and then provides heuristic estimates of variability measured in terms of "high," "low" and "most likely" values. It also provides an actual measurement of risk in terms of mean and standard deviation and upper and lower quartiles, along with a graphical presentation of various risk parameters. While the Excel model just described is a good class project, our startup project is more comprehensive in nature covering a wider variety of financial concepts.

III. DESIRABLE ATTRIBUTES OF A CLASS PROJECT

Project assignments vary widely in their complexity and the amount of time needed for completion. For example, an economic ordering quantity (EOQ) model with imperfect quality items can be rather challenging for a typical corporate finance course, it may be well suited for a decision science course (Wang, Tang, and Zhao, 2007). Most finance class projects do not necessarily have to be as complex as EOQ models. The project outlined in this paper is rigorous yet relatively simple. It is a real world simulation of a firm and the decision making that goes on within it by its financial managers. As discussed above, Chapman and Sorge (1999) recommend the prudent use of such pedagogical tools. However, designing an appropriate project can be tricky and time consuming. From our own experiences in the classroom, we have found that certain key factors must be considered when designing a project assignment.

First, a well-designed class project must logically follow the concepts learned in class and/or the text. There ought to be opportunities for students to clearly and easily relate to certain key theoretical concepts and apply them in practice through the project. Second, it must be doable within the term of the course, which is the case of the proposed assignment. Another issue is whether a project can be done individually or in a group setting. Most instructors encourage projects to be done in small groups of 3 or 4, depending on the class size. Despite the potential for the classic free-rider problem (Ashraf 2004), group projects support the important goals of team building, leadership, responsibility and mutual trust. Business program accrediting bodies, e.g., AACSB, put enormous weight on these values. Moreover, there are alternative means of mitigating free ridership, e.g., peer evaluation by team members. However, a situation may arise that is not suitable for teams and group assignment. For instance, if the class size is very small or students are extremely busy (executives, etc.) who do not have enough flexible time to meet in teams. A desirable project can be done individually, as is ours.

IV. THE PROJECT

There are several steps involved in this project assignment. The first step involves selecting the type of business to be established. Step two entails setting the assumptions under which the financial analysis will be performed. The third step involves calculating a financing rate (the cost of capital), estimating the revenues and expenses over an extended period of time (say a 5-year period). The fourth step consists of applying various capital budgeting techniques to reach an accept/reject decision. The final step consists of evaluating and assessing the risk involved in the cash flows and profitability. Each step is explained in detail in the following subsections.

IV-A: Selection of the Business Type

It is helpful to select a business that does not depend on results of research and development activities, exploration, etc. These unknown or future factors add considerable complexity to the project and undermine the task of estimating probable cash flows from the business by making the whole project seem unreal. Business types such as retail, most manufacturing, consulting, construction, or service make the project more manageable for the student. For those students who do not have a specific type of business they would like to establish, a business run by a family member or friend can be a good choice since discussions with these owners can provide a solid base for estimating the startup requirements, revenues, costs and growth potential.

Occasionally, students run into problems with certain business selections. For instance, franchises can be problematic if estimates of revenues, costs, franchise fees, and other data are not provided by the franchiser. Buying an existing business for project analysis moves the student outside the procedures provided in classroom discussion in the MBA's core corporate finance course and therefore makes the project more difficult for them. This activity is best analyzed with acquisition procedures rather than capital budgeting used in this project. Indeed, this variation of the project can be used for a finance course on Mergers and Acquisitions.

Not-for-profit businesses are frequently avoided by students because they assume that they are not suitable for a profit analysis. However, since these businesses must take in at least as much money as they spend to stay in existence, they are as appropriate for this project as a for-profit business. Businesses that require very large capital outlays at startup for assets with lives longer than the project horizon (say 5 years) will generally not be profitable within the analysis period. This problem can be overcome and is discussed in Section IV-C.

IV-B: Statement of Assumptions

A statement of assumptions used to estimate cash flows is an important habit for students to build. While in the project its function is strictly to build the initial cash flow estimates and provide a base for risk analysis, in an actual establishment of a firm it allows periodic reassessment of the progress expected. Should what initially appeared to be a profitable venture fail to meet projections or economic conditions worsen beyond expectations, the owner may need to either take alternative measures or shut down before losses become excessive. For a project manager in an established firm, changing assumptions may invalidate prior capital budgeting cash flow estimates. It is the responsibility of the project manager to keep upper management informed of these changing circumstances and to re-estimate the probable profit of the project. Failure to do so can significantly impact the profitability of the firm and in turn have a devastating effect on the career of the project manager. Finally, assumptions are also required for the instructor to evaluate the student's ability to apply the concepts. Assumptions generally include such things as the economic conditions, growth in revenues/costs, hiring of employees, increases in fixed assets, cost of capital, termination revenues and expenses, initial inventories and fixed assets, etc. Table 1 contains an example of the set of assumptions to be used for this case.

As suggested in the simplified example in Table 1, the best estimate for sales growth is projected to be 10% annually. Students might more reasonably predict sales growth of 25% in year 2, 15% in year 3 followed by 5% growth in the last two years. As examples, assumptions

might also include a significant increase in payroll in year 3 as a planned administrative staff addition occurs. At the same time one might see increased office expenses and depreciation. Students need to be encouraged to be creative, imaginative, yet realistic when making these assumptions.

TABLE 1

AN EXAMPLE OF A SET OF ASSUMPTIONS

Business Type: Retail Outlet

Expected Case Assumptions*:

Sales Growth
 COGS
 Mode Revenues per year
 Gow of sales

COGS
 Utilities
 Advertising
 Miscellaneous exp.
 50% of sales
 \$5,000 per year
 \$10,000 per year
 \$9,000 per year

IV-C: Cost of Capital and Cash Flow Estimates

Since the project involves a startup company, a basic assumption is that at least initially, it is a sole proprietorship and the cost of capital is composed of the student's own required rate of return plus the cost of borrowing money. Students are asked to call a financial institution to determine what lending rate would be required for a business of the type chosen. The weighted average of these two rates is used as the discount rate for capital budgeting purposes. Students may wish to assume additional investors and incorporate their required rates as well when computing the overall cost of capital.

Students are also asked to estimate cash flows for the initial startup costs and revenue/expenses for five years at which time the business is shut down or sold. The five year life span may appear somewhat arbitrary at first. However from experience, this is a long enough horizon to include most of the changes a new company may encounter so students have the opportunity to manage the growth. At the same time, a 5-year life span of the project is not so long as to make long-term estimates of cash flows too unrealistic and far-fetched. The process and organization of cash flows in this paper follow that presented by Titman, Martin, and Keown (2014).

To demonstrate knowledge of technology (a desirable tool by AACSB), spreadsheets are required for the organization and estimation of cash flows. The initial outlay includes all cash flows that occur at the beginning. Table 2 provides a complete output of the capital budgeting analysis. It shows that our sample project requires modifications to the proposed property as well as furniture and fixtures to open. It also has deposits and opening expenses. These could be utility and phone deposits, operating licenses, and the initial advertising campaign. Working capital requirements might include cash.

^{*}Note that this is only a partial set of assumptions for illustration purpose.

 $\underline{\text{TABLE 2}}$ AN EXAMPLE OF A COMPLETE CAPITAL BUDGETING SPREADSHEET

Initial Expenses	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Fixed Assets	\$100,000					
Renovations	\$20,000					
Working Capital	\$10,000					
Bank Balance	\$25,000					
Inventory	\$30,000					
<u>Miscellaneous</u>	\$9,000					
Initial Cash Outlay	<u>\$194,000</u>					
Revenues		\$500,000	\$550,000	\$605,000	\$665,500	\$732,050
Cost of Revenues		\$300,000	\$330,000	\$363,000	\$399,300	\$439,230
Payroll		\$50,000	\$52,500	\$55,125	\$57,881	\$60,775
Utilities		\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Lease/Rent		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Advertising		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Maintenance		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Insurance Expense		\$500	\$500	\$500	\$500	\$500
Other Overheads		\$500	\$500	\$500	\$500	\$500
Depreciation		<u>\$2,000</u>	<u>\$2,200</u>	<u>\$2,420</u>	\$2,662	<u>\$2,928</u>
Earnings before Tax		\$121,000	\$138,300	\$157,455	\$178,657	\$202,116
Less Taxes @ 40%		<u>\$48,400</u>	<u>\$55,320</u>	\$62,982	<u>\$71,463</u>	\$80,847
Earnings After Tax		\$72,600	\$82,980	\$94,473	\$107,194	\$121,270
Add Depreciation		<u>\$900</u>	<u>\$900</u>	<u>\$900</u>	<u>\$900</u>	\$900
Salvage Value/Inventory						<u>\$51,000</u>
Net Cash Flow	\$194,000	\$73,500	\$83,880	\$95,373	\$108,094	\$173,170
Cumulative NPV*	(\$194,000)	(\$127,182)	(\$57,860)	\$13,796	\$87,625	\$195,150
*Assume 10% Discount Rate						

The next cash flow category includes revenues and expenses occurring throughout the five-year life of the project on an annual basis. Generally called after-tax cash flows, these include annual revenues, annual expenses, depreciation, and taxes. The format of these cash flows follows the general format of an income statement except that interest expense is not included. All after-tax financing expenses are recovered by the level of the interest rate used to discount the cash flows. The final cash flow category is the terminating cash flows. These include all one-time cash flows occurring at shut down and could include after-tax salvage value, disposal/restoration expenses, sale of business revenue, etc. Since these cash flows occur in year five, they should be netted with the year five after-tax cash flows. At this point students should have six cash flows: total initial outlay and cash flows for years 1-5 (year 5 includes the terminal cash flow). Additional instructions given to students in this phase can include:

- After-tax cash flows in years 1-5 must vary. Texts frequently repeat the use of year 1 cash flows in all succeeding years of the project life for ease of classroom instruction. Requiring variability forces a more realistic picture of a firm.
- Record cash flows as they occur. While the after-tax cash flows format resembles an accounting income statement, it does not follow accounting practices. Cash flows should coincide with cash going into and out of a bank account.
- At termination students can assume a complete shutdown with or without salvage value or the sale of the company. For firms that had costly and long-lived fixed assets, realistic profitability will require the sale of the assets or the company in year 5.
- Categories estimated in the after-tax cash flows should be moderate in breadth. For instance, estimates for total revenue and total cost are too broad. For a retail outlet, estimating revenue and costs for every item sold is too detailed.
- Straight line depreciation or MACRS can be used.

Students who are seriously considering starting the business analyzed in the project are permitted and encouraged to be as detailed as they feel necessary.

IV-D: Capital Budgeting Techniques and Acceptability Analysis

Once the net cash flows are obtained, the acceptability of the business is evaluated. Students are required to use several decision criteria methods: pay back period, discounted pay back period, net present value (NPV), profitability index, internal rate of return (IRR), and modified internal rate of return.

- Payback period provides the number of years required for the initial outlay to be recovered from the after-tax cash flows. Since this is strictly an accumulation of the cash flows in years 1-5, it fails to account for the *time value of money* and is considered to be a less than accurate method and, financially speaking, a naïve way of evaluating the acceptability of the project. Acceptability of the business depends on owner-set criteria. For example, the initial outlay must be recovered within 3 years. If the pay back is equal to or less than this hurdle, the business is acceptable. Despite its limitations, the pay back period method remains a popular capital budgeting technique (Harvey and Graham, 2001). It is frequently used as a *preliminary* screening measure in large firms and as the sole requirement in cash poor firms.
- Discounted pay back corrects for the lack of use of the time value of money in the pay back method by discounting each year's cash flow to year zero using the cost of capital as the discount rate. Therefore, this technique is regarded as an improvement on its predecessor and not as naïve. It is interpreted in the same manner as pay back but will obviously take longer to recover the

- initial outlay since the cash flows are in present value terms. Once again, the owner must set the acceptability criterion.
- Net present value (NPV) is the present value of the cash *inflows* minus the present value of the cash *outflows* and provides the dollar estimate of the change in the value of the firm. The business is acceptable if the NPV is positive.
- Profitability index is the present value of the cash *inflows* divided by the present value of the cash *outflows* and provides the dollar return for each dollar invested. The business is acceptable if the profitability index is greater than one.
- The internal rate of return (IRR) is the discount rate that equates the present value of the future cash flows to the initial outlay. It provides the percent return on funds invested *assuming* that the cash flows are reinvested at the internal rate of return as they flow into the firm. This is known as the reinvestment rate assumption. If these funds cannot be reinvested at that rate, the return will not be achieved. For this reason, sometimes the IRR rule is regarded as too optimistic, and the *modified* IRR is computed as discussed in the next paragraph. The internal rate of return must be greater than the firm's cost of capital for the business to be profitable.
- When the reinvestment rate assumption cannot be met, or when a relatively more conservative technique is desired, the *modified* internal rate of return is calculated. All the cash flows are compounded to the final year (year 5 for the project) using a reasonable rate for reinvestment, generally the cost of capital, and totaled to arrive at the future value of all cash flows. The modified-IRR is the implied rate that equates the initial outlay with the future value just calculated. This modified-IRR must be greater than the cost of funds.

If the business is unprofitable, students are asked to discuss some methods that might make it profitable. For example, operating from a home office or obtaining lower cost facilities might delay costs, or slowing/increasing the growth rate might provide a greater spread between revenues and costs. Students are not required to apply these suggestions.

IV-E Risk Assessment

Students are also asked to analyze business risk using one of four risk analysis techniques and to discuss their findings. The methods suggested are sensitivity analysis, scenario analysis, decision tree analysis, and simulation. In all cases, the student can also determine the probability of the net present value falling below zero since this requires the average of several estimates of the net present value and its standard deviation. Although these techniques carry different nomenclature depending on the source, their definitions below should be familiar to faculty.

- In sensitivity analysis, the assumptions used in the analysis are changed one at a time to determine those with high impact on the net present value. These are called driver variables and generally require a high degree of confidence in the estimate or the ability to be well managed for an overall assessment of low business risk.
- Scenario analysis involves modifying the expected scenario already presented with the worst case and best case estimates of the assumptions used to create the model. This has the advantage of incorporating the interactions of all the variables into the analysis.
- Decision tree analysis provides re-evaluation points as the establishment of the business progresses. Owners can incorporate their experience at these points to re-estimate profitability. They may decide to expand/contract the business, modify facilities, shut down, etc. The decision tree provides "legs" to determine the net present values for each of the possible paths that the firm might take. The expected net present value and its standard deviation can assist in the risk assessment.

- Simulation provides estimates of the net present value by randomly selecting a value from each variable's probability distribution and combining them for the trial NPV calculation. Computer simulation software is generally instructed to make 1,000 to 10,000 trail runs, creating a net present value probability distribution. The area under the curve below a net present value of zero provides an assessment of the risk of the business.

Summarization of the acceptability of the business including both the decision criteria and the risk analysis concludes the project. Since risk analysis provides no definitive answer for how much risk is acceptable, students must apply their own risk preferences to this decision. Depending upon the preparedness of students, this section can be excluded from undergraduate finance courses if it becomes too overwhelming for them.

V. SUMMARY

This paper describes a capital budgeting project for the startup of a new business (e.g., a sole proprietorship). It is a real-world project that is do-able in a semester. It is preferably assigned as a group project, but can be adapted for individual student assignment. The company/business type is chosen by the student(s). Based on the types of assets and services required, students estimate the initial startup cost, the recurring revenues and expenses over the life of the business and any terminating cash flows. Once the cash flows are estimated, the business is evaluated for profitability and risk using the capital budgeting techniques of the *net present value* (NPV) and the *internal rate of return* (IRR). Students then must decide if they would proceed with that "dream" business.

The project can be assigned to MBA students in their core corporate finance course or with slight modifications it can also be included in courses such as management, marketing or entrepreneurship. A remarkable characteristic is that the project can be used as a thread connecting much of the MBA curriculum, creating a management business plan, a marketing plan, a cash budget, etc. in different classes. The described project has also been used in undergraduate finance classes by eliminating the risk analysis. Certain non-business professional programs, such as health care or engineering, where students frequently plan to open their own business, may also find it beneficial to include it in their curriculum.

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ⁱ An earlier version of this paper with Nancy Jay was presented at the 3rd American Institute of Higher Education Conference and appeared in the proceedings.

A COMPARISON OF INTERNATIONAL STUDENT ATTITUDES CONCERNING ACADEMIC DISHONESTY

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A COMPARISON OF INTERNATIONAL STUDENT ATTITUDES CONCERNING ACADEMIC DISHONESTY

ABSTRACT

Incidents of academic dishonesty continue to affect every college and university in the United States, at both the undergraduate and graduate levels. This is also true at institutions of higher education in other countries. At some point during their academic careers, estimates are that 50-70% of all college students engage in various forms of cheating, including plagiarism, group work on individual assignments, improper use of technology, and other forms of dishonesty. The need for action to minimize this problem is evident, especially given the need of employers for highly-skilled and ethical workers in a global economy, and the recent spate of business scandals related to ethical misconduct in many nations. This article describes the perceptions of male and female business students from 20 different nations on 5 continents regarding what specifically they think constitutes academic dishonesty, and what they perceive should be done when infractions occur. The results of the nominal data analysis herein could provide guidance to college professors and administrators as they evaluate incidents of academic dishonesty involving students from different cultures and backgrounds around the world.

Keywords: Academic integrity, international, cheating, student attitudes, instructor actions

INTRODUCTION

Frederick Douglass (Douglas, 2012) viewed integrity highly and stated, "The life of the nation is secure only while the nation is honest, truthful, and virtuous." The authors of this article embrace this concept and have extensive, long-term experience as both college professors and management consultants. Over the past several years, they have collected information from business students attending both domestic and foreign colleges and universities on their attitudes toward academic dishonesty and what they do when infractions occur (Frost, Hamlin, & Barczyk, 2007). This paper provides a review of the literature about existing student attitudes towards academic integrity, and an analysis of a survey given to over 200 students in 20 nations about their perceptions of acceptable and unacceptable behavior in an academic setting. These perceptions are based on different scenarios given to the students on the survey instrument, and also provides input regarding whether the students themselves have engaged in unethical behavior. It is hoped that, with the results of this paper, faculty and administrators who are involved in adjudicating cases of academic dishonesty will be provided helpful information regarding cultural differences which might impact their decision about how best to discipline those who break the rules.

This paper is organized into four parts. The first describes why the problem of academic dishonesty is important, examining the extent of the problem and describing approaches to control it. The second is a review of the literature, covering current research and findings about

how colleges are dealing with the problem in a multi-national setting. The third is an analysis of our primary research and the tool used to conduct it. The last section provides concluding remarks and assesses the implications for further study in the field.

WHY THIS PROBLEM IS IMPORTANT

While the root cause of academic dishonesty is the subject of much debate, anecdotal evidence suggests multiple factors, including media influence, lack of family training, peer pressure, and changing societal norms. Many undergraduate students in colleges and universities either engage in dishonest behavior themselves; refuse to turn in fellow students who they see cheating; think it is permissible to cheat if the rewards are high enough; or have some other type of unhealthy or unrealistic attitude. These attitudes can result in more dishonest behavior, which in the long run, hurts both the cheater and honest students that do not engage in such acts (ibid).

When considered in tandem with the public perception of increased corporate dishonesty (which has evolved over the past decade as a result of lax ethical practices) and employers' requirements for educated business graduates with a thorough grounding in integrity, the need for a solution to the problem of academic dishonesty has never been greater. Six points highlight the urgency of this issue. First, academic dishonesty occurs frequently in every discipline, as discussed in the next section. Second, there is often no uniform method for dealing with the problem even within the same department, much less between different universities in different countries. Further, administrators are often more concerned with increasing enrollment than with reducing unethical behavior. Thus, individual faculty members can be left to fend for themselves, and most instructors, regardless of tenure status, do not wish to increase their workload by becoming "enforcement officers" in the classroom. Third, non-tenured faculty members have even less incentive to deal with this problem, since student retaliation on end-of-semester evaluations can interfere with the instructor's goal to attain tenure. Fourth, discrepancies and inconsistencies in either policy or implementation can result in legal problems. Fifth, honest students are disadvantaged when dishonest students are not caught and punished, especially if the instructor grades on a curve. Sixth, how the issue is handled is of paramount importance in obtaining a positive outcome from this very negative experience. Academic instructors must foster the perception that integrity policies and enforcement mechanisms are fairly and consistently applied for the benefit of both faculty and students. Even if these points are addressed, dishonesty will remain a problem for colleges and universities. The scope of the issue is so massive that the authors strongly believe that it is their responsibility to at least make an effort to minimize it (Hamlin & Powell, 2008).

Not many schools include vigilance in academic integrity in their promotion and tenure guidelines. This may contribute to the attitude in some universities that what constitutes cheating needs to be redefined. There is often an opportunity to apply personal interpretation. It is interesting to note that students in some cultures often operate under a different "moral code" than American and western European universities, and thus they may not view certain types of restricted behavior as dishonest. This often occurs in collectivist countries where the culture embeds in its citizens an attitude that "one cannot let one's countryman fail." This very perception caused two Eastern European students to engage in cheating in a class taught by one

of the authors in 2011, one of which was expelled from the University in Austria where the class was being taught.

Most research projects and studies of academic dishonesty in the past compare student behavior and/or attitudes from universities within the same country. A few compare trends between two or three countries. This report seeks to expand the scope of the comparison, by using the same survey instrument to compare student attitudes in many nations about the same academic scenarios. Given the fact that American, and especially European, college classes today often contain students from many different nations, such information might help faculty members and administrators in their efforts to both communicate expectations, and handle with empathy and fairness any infractions in the classroom.

REVIEW OF THE LITERATURE

In the U.S., academic dishonesty permeates all levels of the educational system. The March 3, 2014 issue of Bloomberg Business Week ran a cover story about the cheating scandal involving student athletes at the University of North Carolina, in which a learning specialist who tutored mostly football and basketball players reported widespread cheating, unearned grades and even credit for non-existent courses (Barrett, 2014). A study by Bushway and Nash (Bushway & Nash, 2007) reported that American students cheat as early as the first grade. Similar studies show that 56% of middle school students and 70% of high school students have cheated in the course of their studies (Decoo, 2002). The first scholarly studies of academic dishonesty at the college level were conducted in the 1960s (Bowers, 1964). This researcher found that in US colleges and universities, 50-70% of students had cheated at least once. In a major study in 1990, rates of cheating remained stable, but differed between institutions, depending on their size, selectivity, and anti-cheating policies (LaBeff, Clark, Haines, & Diekhoff, 1990). Generally, smaller and more selective schools had less cheating. Small, elite liberal arts colleges had cheating rates of 15-20%, while large public universities had rates as high as 75% (LaBeff, Clark, Haines, & Diekhoff, 1990). Klein and others (Klein, Levenburg, McKendall, & Mothersell, 2007) surveyed 268 professional students and found that business students did not report cheating more than the other students. However they were more lenient in their attitude toward cheating.

In Europe, the Middle East, Asia, and Africa, dishonesty is also prevalent at all levels. The perceptions about what actually constitutes dishonesty also differ markedly between cultures. In one study, significant differences were found between American and Polish students regarding attitudes, perceptions and tendencies toward academic dishonesty (Lupton & Chaqman, 2002). Donald McCabe, a very well-known authority on academic dishonesty in the U.S., did a study comparing student attitudes and norms from the Middle East (specifically Lebanon) to those of Americans. His results support the view that Lebanese university students are strongly influenced by the norms of the collectivist society in which they were raised, and therefore differ in their attitudes about what constitutes academic dishonesty from their American counterparts, who were raised in a more individualistic society (McCabe, Feghali, & Abdallah, 2008).

The impact of culture on a student's perception of what constitutes dishonesty is illustrated in a paper that appeared in the College Student Journal in 1998. This research compared cheating trends of American versus Japanese students, and also what determinants, techniques and deterrents contributed to these trends (Burns, Davis, Hoshino, & Miller, 1998). Another study by Hajime Yasukawa analyzed how cross-cultural differences affected both the quantity of cheating, and the attitudes about whether cheating was actually dishonest. He compared U.S. and Japanese students over time, and found that Japanese students reported a higher incidence rate of cheating on exams, a greater tendency to justify the cheating, and also greater passivity in their reactions to observing other students who cheat (Diekhoff, Shinohara, & Yasukawa, 1999).

In Russia, there is a heavy focus on group assignments in education from a young age. This "muddies the water" about what is or is not permissible when students are expected to do their own work. One study of college business students in the U.S. and Russia found major differences in attitudes, perceptions and tendencies towards academic behavior and dishonesty (Lupton & Chaqman, 2002). Similarly, research about cheating patterns between college students in India and the U.S. showed not only that the impact of growing up in a collectivist culture affects perceptions about what constitutes dishonesty, but even illustrates the differences between the sexes of such perceptions. For example, the data revealed that Indian and U.S. men were more likely to cheat than women of both cultures (Taylor - Bianco & Deeter-Schmelz, 2007).

It is also important to note the motivators for cheating. Simkin and McLeod (2010) noted several cheating motivators in business students. For example, they noted the issue of new opportunities that did not exist twenty years ago. The ability to quickly copy materials verbatim from the internet is very tempting to time-strapped students. This is often coupled with a "winning is everything' attitude in some cultures that can justify doing anything that will give one a competitive advantage. There is also the issue linked to the previous motivator that the reward for excellence may exceed the punishment if caught breaking an academic integrity rule. In fact, these are sometimes only guidelines and these are open for personal interpretation. There is also a major concern for the faculty member's career and/or the classroom environment when noting an issue of academic integrity. Some schools foster an environment that accepts issues in academic integrity and any faculty member that takes a student to task on integrity issues may find their career sidetracked.

The issue of academic integrity and dishonesty in education has also been addressed in recent presentations. In a 2014 paper presented at the 22nd Annual International Conference on Academic Integrity the presenters reported that over half of the students at the two subject schools cheated often (Click & Walker, 2014). There were also similarities in student opinions about the reasons for their dishonesty. The students stated that their main motivations were:

- Taking the easy way out
- Laziness
- Not enough time
- Wanted better grades

The impulses to cheat stated above are countered by a study into the reasons not to cheat and act dishonestly. In an article in the Journal of Experimental Education, Miller and others studied the reasons students choose not to cheat. The four reasons were learning goals, character issues, moral beliefs and the fear of punishment. They also noted that punitive consequences are needed when the student has not developed a strong character or moral belief as being important to their success in the goal of education (Miller, Shoptaugh, & Wooldridge, 2011). Another study compared student perceptions to cheating at various schools, and found that traditional honor systems, with specific rules and regulations in place, are more effective at cultivating academic integrity among students. However, they also found that modified honor systems may not be as effective as previous research suggests (Schwartz, Tatum, & Hageman, 2013).

Academicians are apparently confused about who has what responsibility to teach issues concerning academic integrity. Erika Lofstrom and others studied the issue of who teaches such concepts at colleges in New Zealand and Finland. The results of their study showed that the academicians were united in their ideal of the importance of academic integrity; however they were "not of one mind about what it is, how it should be taught, whether or not it can be taught, whose responsibility it is to teach it, and how to handle cases of misconduct (Lofstrom, Trotman, Furnari, & Shephard, 2015)." For example, professors who use group case studies may find that collusion, "free loading," and other problems arise. Some students will not participate at all and expect full academic reward for being part of the group. This issue was noted by Sutton and Taylor with their comment that "there is often a general absence of clear guidelines as to where the boundary lies between cooperation (commendable) and collusion (unacceptable)." (Sutton & Taylor, 2011). The issue of collusion was a finding in another study where ten scenarios were provided to undergraduate pharmacy students. The researchers noted there was quite a bit of uncertainty on academic integrity decisions when collusion was involved. They recommended training as a method to reduce this uncertainty. Another issue they found involves the concept of a whistleblower. Is the student required to report on other student's behaviors, especially in absence of a strict honor code explicitly covering that issue? The final issue these international instructors identified was the lack of professional development support to address issues of academic integrity as part of their educational effort (Emmerton, Jiang, & McKauge, 2014).

An recent international study involving 27 European nations was led by Tomas Foltynek and Irene Glendinning (Foltynek & Glendinning, 2013). They found inconsistencies between institutions in these countries on issues such as understanding academic integrity, the accountability for decisions made, having clear processes to be followed and the resulting decisions of faculty investigating academic integrity violations. They noted an increasingly disturbing trend for exhibiting a "head in the sand" attitude. Further, the authors of this study saw a variance between the western and eastern European cultural attitudes about collaboration on classroom assignments. Eastern European students tended to feel that plagiarism was a relatively normal thing and often exhibited an attitude of "shoot the whistleblower," while their western counterparts were more individualistic in their approach to class assignments.

One study focusing on syllabus statements to influence student academic integrity used statements based on prohibitions and academic integrity. They hypothesized that the statements in the syllabus would be an effective method of motivating change in the student's ethical

behavior. However they found that, while a statement on the issue of academic dishonesty may provide them a measure of guilt, such statements did not change a student's intent to cheat. They summarized by stating that their findings "clearly show that various types of positively viewed syllabus statements that induced cheating-specific guilt did not have any effect on cheating intentions. In addition, different themes presented in the syllabus statements seemed to resonate with different students; some feared the punishment aspect, and others were uplifted by the high sense of personal honor. Based on these findings, we conclude that a variety of university-wide approaches to increasing academic integrity that go beyond single syllabus statement interventions are likely to be the most effective means to academic integrity," (Staats & Hupp, 2012).

ANALYSIS OF PRIMARY RESEARCH

Data Analysis

Data was collected from multiple international business classes over the past three years. Two hundred thirty students participated in a multi-question survey to identify their personal attitudes towards varying issues of academic integrity. These students were international undergraduate students in a business major. The survey was conducted in hard copy with the students circling their selected choices and writing responses to the open question that dealt with their personal attitude/view of academic dishonesty and cheating. We chose to use hard copies as some of the students did not have access to computers to enter responses on-line during class, and the motivation to complete the survey would have been reduced after class time. The surveys were entered into an Excel worksheet and reviewed for accuracy. This involved a hand checking each entry for accuracy combined with computer analysis for error checking. The gender breakout for this survey was 129 females and 101 males from thirty countries. The following table (Table 1) shows the sample number from each population sorted from highest grand total to least:

Table 1: Distribution of Students by Country			
Country	F	M	Grand Total
Austria	28	24	52
USA	10	21	31
France	13	13	26
Indonesia	5	6	11
Canada	8	2	10
Spain	9	1	10
Lithuania	6	3	9
China	7	1	8
Germany	6	2	8
Columbia	1	6	7
Mexico	6		6
Sweden	2	3	5
Finland	4		4
Japan	3	1	4
Slovakia	2	2	4

Table 1: Distribution of Students by Country			
Country	F	M	Grand Total
South Korea	2	2	4
Czech Republic	2	1	3
Netherlands	2	1	3
Portugal		3	3
Russian Federation	2	1	3
Chile	1	1	2
Italy	1	1	2
Latvia	2		2
Taiwan	1	1	2
Turkey	1	1	2
Belgium	1		1
Brazil	1		1
Croatia	1		1
DR Congo		1	1
Greece		1	1
Holland		1	1
Hungary	1		1
Luxemburg		1	1
UK	1		1

The survey consisted of thirteen questions in three domains:

- The student's participation in an action of academic integrity
- The student's personal view on the action
- The student's personal view on what action the instructor should take

There are a few instances where less than 230 students provided responses. Those were coded NR for no response. The following coding scheme was used to prepare the data for descriptive statistics on the first category of the 13 questions. The authors used this system to establish a general direction of the student's responses.

•	e) never and/or a) 1 - 2 times=	coded together as Rarely
•	b) 3 – 5 times=	coded as Occasionally
•	c) $6 - 10$ and/or d) many times=	coded together as Many Times

The questions consisted of these thirteen varying concepts and scenarios of academic integrity.

Table 2: 13 Questions posed to students
1) In the past, I have directly copied another student's homework.
2) In the past, I provided my homework to another student.
3) In the past I worked with another student on an individual assignment instead of working alone.
4) In the past I worked with another student on a take-home exam instead of working alone.
5) In the past, I used a cheat sheet hidden in an ink pen, or on my body, etc., during an exam.
6) In the past, I received exam answers via a cell phone or another communications device.

- 7) In the past, I collaborated with another individual to receive exam answers during the exam
- 8) In the past, I reviewed a copy of the actual exam before test time.
- 9) In the past, I provided answers to another student before they took the exam.
- 10) In the past, I programmed answers into my calculator, cell phone or electronic device.
- 11) In the past, I wrote mnemonic helps (a short rhyme, phrase, or acronym for making information easier to recall) on a wall behind the instructor.
- 12) In the past, I copied text for a school assignment directly from the internet without any citation.
- 13) In the past, I obtained a research paper from the internet and turned it in for a class assignment.

Actions of Students

The first question set dealt with the actions of the student, things that they were doing themselves that would be questionable in the arena of academic integrity. The following chart (figure 1) of student actions shows all thirteen questions of the first domain. As we investigate the international student responses, we found anomalies from the general trend. We see a strong response (greater than 50% of the students responding rarely) for their personal actions except on questions two and three. The international students often seem to not have a problem in sharing their work or answers with other students, even if this may violate the instructor's wishes. They will share homework and assist another student with individual assignments. It may be a cultural effect that they feel obligated to assist students to boost another student's grades so they may excel as a group.

Further examination of the data show that there is strong opposition (90% rarely participating) to certain behaviors in the student's life. Questions six, eight and thirteen show little adoption of the activities of:

- Using a communications device to receive exam answers,
- Providing answers to another student before they took the exam, and
- Obtaining a research paper from the internet and turning it in for a class assignment.

Question six shows an area requiring technical expertise which may limit participation. Therefore the use of high tech may limit participation by international students. However, they also may not be inclined to use this technology or provide answers to another student before the exam. Also, apparently most of the students are unwilling to provide another student answers to an exam. However, perhaps they never gained access to an exam to share with another student.

The final question of the suite of thirteen shows that very few students have downloaded research papers from the web. However, closer examination reveals that 82% of the students have never downloaded a paper (Figure 2 – Question 13a). Our concern is that not many classes are requiring a research paper. A large percentage of students have never downloaded a research paper. However nearly one in five have downloaded at least two research papers in the past. This is a major concern as research papers can form a major portion of the student's grade. It is also an important component of personal development. The critical thinking aspects of research and synthesis of those concepts into a research paper is important for a college student. We view this as a major concern revealed through our research.

100.00 90.00 80.00 70.00 60.00 Rarely - Never 50.00 ■ Occasionally 40.00 Many times 30.00 20.00 10.00 Quest Quest 1a Quest 2a Quest 3a Quest 4a Quest 5a Quest 6a Quest 7a Quest 8a Quest 9a Quest Quest

Figure 1: Student Actions on 13 Questions

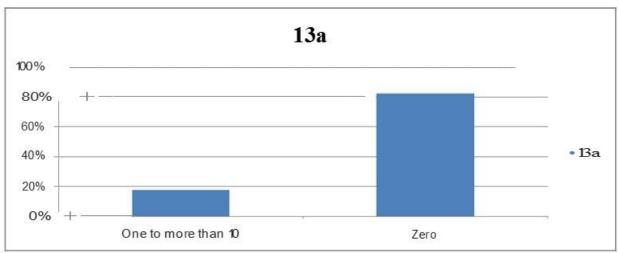


Figure 2: Downloading a Term Paper

Student's Views

It is interesting to note the responses of students when it is someone else caught cheating (i.e. not their own personal actions). The second category of responses requested the student to respond to their personal view of the integrity of a specific action. The same 13 questions were considered as the student was asked, "I view this as" with choices of a) acceptable behavior b) okay occasionally c) rarely okay d) unacceptable behavior. The responses were grouped:

- Acceptable behavior
- Okay occasionally
- Rarely okay
- Unacceptable behavior

As we view questions one – thirteen (Figure 3), the response of unacceptable behavior dominates the response set. This is especially evident in questions five through eight, and thirteen, where over 50% of the respondents indicate the issue as unacceptable.

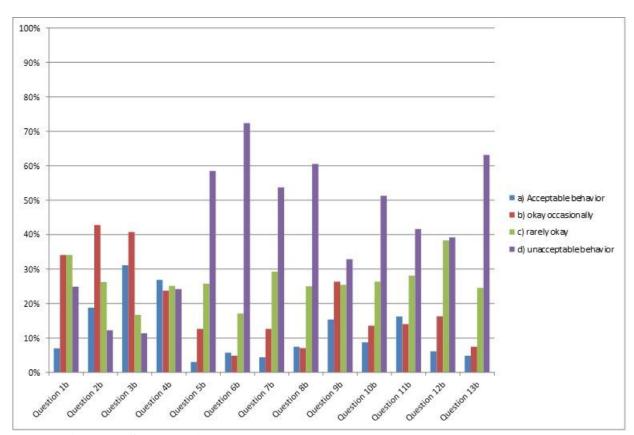


Figure 3: Student View

Also, as we view the data the first four questions show students selecting all of the options with no outstanding option. Of this set, questions three and four display the strongest indication for acceptance of an issue of academic dishonesty. These questions are:

- 3) In the past I worked with another student on an individual assignment instead of working alone.
- 4) In the past I worked with another student on a take-home exam instead of working alone.

Both of these questions provide a further indication that the international students are amenable to supporting fellow students. This parallels their indications under their personal actions earlier in the survey.

Student Suggested Instructor Response

The first option for students to choose on the survey from the array of possible instructor responses is to "ignore it (Figure 4)." Those questions where more than 30% of the students choose "ignore it" are as follows:

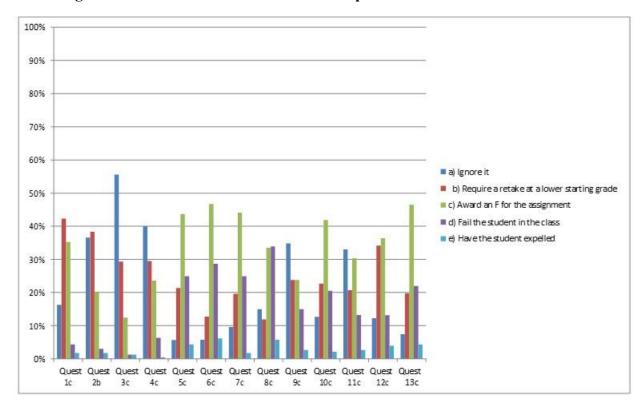


Figure 4: Student's Selected Instructor Response

- 2) In the past, I provided my homework to another student (37%)
- 3) In the past I worked with another student on an individual assignment instead of working alone (56%)
- 4) In the past I worked with another student on a take-home exam instead of working alone (40%)
- 9) In the past, I provided answers to another student before they took the exam (35%)
- 11) In the past, I wrote mnemonic helps (a short rhyme, phrase, or acronym for making information easier to recall) on a wall behind the instructor (33%)

Again, as with the two previous categories, these are conditions where the student is reaching out and assisting a student that needed help (perhaps in their opinion). Number eleven may be viewed as less significant so the instructor could possibly ignore it. This was the highest

response rate for this question, although a nearly equal number (30%) felt the instructor should give the student an F for that exam.

To capture the issues that invoke an F for assignment or F in the class, we combined the responses of c) and d) (Figure 5). The students suggest a severe penalty for those actions described in questions 5-13 below:

- 5) In the past, I used a cheat sheet hidden in an ink pen, or on my body, etc., during an exam (69%)
- 6) In the past, I received exam answers via a cell phone or another communications device (75%)
- 7) In the past, I collaborated with another individual to receive exam answers during the exam (69%)
- 8) In the past, I reviewed a copy of the actual exam before test time (67%)
- 9) In the past, I provided answers to another student before they took the exam (39%)
- 10) In the past, I programmed answers into my calculator, cell phone or electronic device (62%)
- 11) In the past, I wrote mnemonic helps (a short rhyme, phrase, or acronym for making information easier to recall) on a wall behind the instructor (44%)
- 12) In the past, I copied text for a school assignment directly from the internet without any citation (50%)
- 13) In the past, I obtained a research paper from the internet and turned it in for a class assignment (68%)

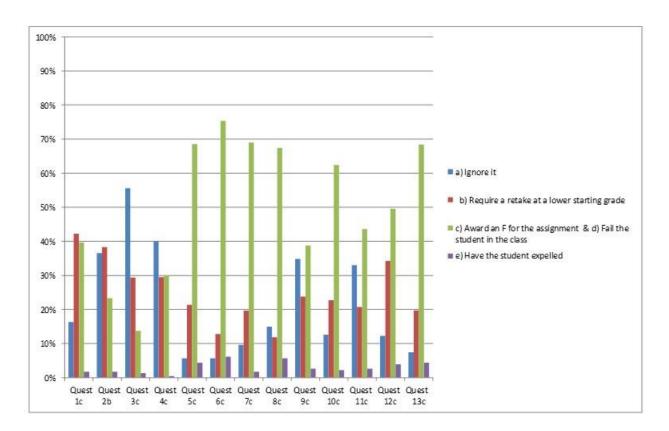


Figure 5: Instructor Action "F" Combined

When categories of c) & d) are combined, in questions five, six, seven, eight, ten, and thirteen a dramatic rise is displayed over the other choices. The first four questions are not excessive; however the others mentioned previously jump to your attention. A large portion of the students are indicating that action should be taken by the instructor in these questions that would be considered more serious than the first four question scenarios. It is also interesting that

questions nine and eleven find support of all five responses by the instructor. Questions six and eight have the strongest selection by students that an instructor should pursue expulsion from school as a penalty for that action.

CONCLUSION

This international study provides some insights on the in-class behavior and attitudes of business students from various countries and cultures. The students are showing a willingness to reach out to fellow students to assist them in home work and exams. They are hesitant (a maximum of 6% of the students) to select expulsion from school for any of our scenarios. A final serious concern is that 18% of the students (basically one in five) have downloaded research papers from paper mills instead of developing them on their own. Teachers working with international students should be aware of theses tendencies and take actions to minimize these infractions.

Also, these international business students are consistent in their responses under all three domains (their personal actions, how they view those actions and their recommendations for actions by the instructor). We designed the academic integrity survey to query the student from least serious (copying homework) to most serious (submitting a purchased research paper). The students demanded stiffer punishments for the more serious infractions and often selected "ignore it" for the lesser offenses.

We do not have a robust enough sample to show indications between countries; however we intend to expand our analysis in two areas. The first is a comparison of responses between the genders in the survey. Can a significant difference on any question be shown between the genders? The second is a content analysis of the written comments from the 230 students. An analysis of the content of their personal responses could establish two issues. What are the student's primary concerns for academic integrity and are their survey responses confirmed by their open ended responses?

We hope the analysis of the responses of the international students is enlightening and can guide the pedagogic efforts of instructors who teach such individuals. It is imperative that the professor clearly articulate what is acceptable and unacceptable behavior for their classes, both orally and on the syllabus. The instructors may wish to stress the importance of pursuing higher ethical standards in classes where students come from disparate regions. Examples or cases of ethical behavior, or student research on the importance of ethical behavior, may be important to modify the behavior of the students. Also, it may be important for the instructors to adopt a stronger vigilance in detecting issues of academic dishonesty, and apply any penalties fairly and consistently. By adhering to these recommendations, all parties will know what is expected, and how infractions will be handled. This will hopefully reduce the number of incidents of dishonest behavior.

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COLLECTIVE IDENTITIES, CONTRASTING IDENTITIES: A STUDY OF INTRA-ORGANIZATIONAL IDENTITY-LEARNING

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ABSTRACT

In this paper, we report on a study that explores how organizational participants "learn" the concept of collective identity. Through an examination of two different organizational settings, we attempt to show how organizational members jointly create and recreate distinctive, recognizable collective identities. Their construction of collective and individual identities can be viewed as an ongoing reciprocating process of learning, interpretation and negotiation. Just as the concept of individual identity can be conceived of as a sense of self that is not only produced within the situation but also brought to it, so too can the concept of collective identity be conceived of as a sense of organizational self which is both produced within the situation and also transcends the situation. Collective identity is seen as that sense of organizational self that is experienced and learnt by organizational members which endures over time and is transmittable to future generations.

What does it mean to speak of collective identity? At the very least, we can say that the concept of collective identity suggests the existence of some form of relationship between the individual self and some larger referent such as a group, community, or organization (Koschmann, 2013). With the work environment providing a substantial arena for the enactment of such a relationship, it should come as no surprise that the nature of collective identity has been of particular interest to organizational scholars. Researchers studying person-organization fit (Cha, Chang & Kim, 2014), gender and occupation (Ashcraft, 2012), organizational sensemaking (Patriotta & Spedale, 2009), entrepreneurship (Wry, Lounsbury & Glynn, 2011), and organizational identification (Lok, & Willmott, 2014) have shared as a problematic the relationship between the individual self and the collective. The nature of this relationship has had a long history of being researched by social identity and self-categorization theorists (Tajfel, Flament, Billig & Bundy, 1971), anthropologists (Geertz, 1973) and symbolic interactionists (Hewitt, 1988). Earlier theorists of organizational learning had used cybernetic metaphors (Argyris & Schon, 1974) to articulate how relationships between individuals and collectives traverse various contingent and dialectic terrains, through a series of feedback loops. Using these theories collective identity has been associated by current organizational researchers with both remembering and forgetting (Anteby & Molnár, 2012), with time as well as space (Ybema, 2010), with the workspace and life beyond it (Conroy & O'Leary-Kelly, 2014). Common to all these theories is the assumption that the study of the collective is a necessary companion to the study of the individual self. Despite the breadth and depth of this scholarly activity, there is much

that remains elusive in our understanding of the relationship between the individual self and the collective.

Specifically, our interest in this research is in understanding the interactive processes through which both individual and collective identities are mutually created, experienced, learnt, and transmitted. In this paper, we attempt to examine how organizational members create and recreate distinctive, recognizable collective identities for themselves and the organizations they are associated with. In order to examine these issues, we report on an extensive qualitative research project conducted by the lead author in two student-run businesses at a large university in the northeastern United States. Collective identity forms an integral part especially of organizations that articulate a mission beyond the profit motive (Ergas, 2010), which makes the non-profit organization an especially rich terrain to examine this concept empirically. Our empirical analysis shows that individuals construct collective identities through their daily enactment of organizational processes, rituals, and symbols within the organizational space. We study the sense-making and meaning-making activities of individual organizational members, because it is from their inter-subjectively shared meaning that the organization emerges as a social reality (Smircich, 1983). From this perspective, we can begin to see how collective identity may in turn, become a critical part of the individual self. An examination of this process holds promise for not only better understanding how organization members contribute to and experience collective identity, but also how members of organizations with superficially similar structures and processes may construct substantially different collective identities.

In the rest of this paper we report on our findings, which reveal both similarities and contrasts in the ways members of these two organizations make sense of their collective identities.

RESEARCH DESIGN AND DATA COLLECTION

The organizations studied in this research are Grassroots Cafe, a vegetarian restaurant, and Copyserve, a photocopy and graphic design service (all names in the paper have been changed for confidentiality). Both are collective organizations composed and managed exclusively by undergraduate student members. Within the structure of the university, the businesses operate under the University Entrepreneurship Center (UEC). The purpose of the UEC is to provide support and resources to Grassroots, Copyserve, and eight other student managed businesses on campus.

The research was conducted with the prior permission and extensive cooperation of members of both businesses and the UEC. The principal researcher obtained prior permission from the UEC leadership, and of the student leaders who managed both organizations. He then conducted an extensive observation of these sites over four months. Activities observed included servicing customers, coordination of meetings and various other organizational functions. The researcher attended planning meetings, purchasing runs and financial reconciliation meetings. He also observed people preparing and selling food at the Grassroots café, and volunteered in those activities, including set-up and cleanup. With Copyserve, he participated in print-runs, copier maintenance, troubleshooting and cleanup routines as well. In addition, he interviewed a number of organizational members across both collectives, using unstructured, naturalistic techniques (Putnam, 1983). Participant observation was meticulously documented through more than 400 pages of field notes, interviews were recorded and transcribed, and other researchers were used

to provide feedback on coding methods, concept cards and evaluative schema (Miles and Huberman, 1994).

The methodology applied was in data analysis interpretive and phenomenological in character; indeed, an interest in identity was not the entry point for this research project, but rather an issue that emerged over time. This research project be characterized as exploratory; what it lacks in breadth of scope can be compensated for by an internal validity that is more important for theory building (Jacobides, 2005; Yin, 2013).

Upon analysis, we found that the members of Grassroots and Copyserve have fashioned organizations that their members experience in strikingly different ways. Grassroots has been described by its members as viable, creative, a place to learn and grow, and an arena for the development of satisfying personal relationships. Copyserve, by contrast, has been depicted in more diffuse and varied ways. Struggling for its financial viability and losing its relevance in the era of digital communication, it has been depicted as a place to express personal creativity for some, but not others. Moreover the organization has, over time developed a hierarchical character, with the organizational membership divided into two distinct parts, the "copy side" and the "design side." The "design side is seen as more prestigious, which produces intramember tensions more characteristic of a traditional organization, rather than the egalitarian collective it aspires to be. The implicit tensions between the two organizations, with one seeming more in tune with its broader vision than the other, also create further dynamics which are relevant to the identity issues we are examining here.

Early on, the principal researcher became intrigued by the interplay of similarities and differences in these two organizations thrown up by the data, and resolved to focus subsequent observations and interviews on illuminating the ongoing processes that have created and are continuing to create organizational meanings experienced by the members of Grassroots and Copyserve.

This paper marks our attempt to "make sense" of our observational and interview data that was generated from that process, by engaging in an exploration of the collective identities that emerged from the study. Just as the concept of individual identity may be conceived as a sense of self that is not only produced within the situation but also brought to it (Hewitt, 1988), collective identity is conceived as that sense of "organizational self" experienced and constructed by organizational members which endures over time and is transmittable to future generations. This sense of organizational self became apparent early in the research, as members of both Grassroots and Copyserve seemed to share a strong sense of connectedness and commitment to images of their organizations.

Initial research suggested that members from both organizations viewed this strong sense of connectedness and commitment in direct contrast to other, hierarchical, organizations operating in the geographic vicinity of the university. Frequent reference to "no bosses here" and "we are all managers" and direct comments to suggest that "we're different from a real business" tended to support this contention. These sentiments were expressed across both organizations, suggesting an exploration of their common, egalitarian and democratic structures and processes. Consensus decision-making, "all-staff" meetings, and peer evaluation processes might explain the strong sense of collective identity we perceived.

Or, perhaps it was the overarching influence of the university environment and common access to institutional resources, which would account for the observed phenomena. Institutional theorists (DiMaggio & Powell, 1983) argue for the power of isomorphic tendencies whereby diverse organizations evolve toward greater similarity due to the homogenizing forces of the

environment. Could isomorphic evolution provide a reasonable explanation for the similarities in the collective identities we observed?

As we began to analyze the primary data from the observations, we began to sense however, that these collective identities, while similar to the extent that organizational members contrasted themselves with "other" external organizations, were also quite distinct from one another. Grassroots' members seemed to exhibit model practices of cooperative action, decentralized and regenerative leadership, collective decision making, and reasonably efficient and profitable operation, along with a confident view of the organization's future. Copyserve's membership seemed to be characterized by confusion, centralized and inconsistent leadership, distrust, and a lack of faith in ongoing financial viability. These differences became increasingly visible to us as our research progressed, and it became clear that structural and isomorphic explanations provided an insufficient account of the complexities we observed.

A PHENOMENOLOGICAL APPROACH

A more fruitful exploration of the collective identities of these two organizations flows from a phenomenological approach (Berger and Luckman, 1967; Husserl, 1970.) Such an approach is grounded in the belief that objects have no *a priori* meanings. Only through individuals' interactions with those objects are they imbued with meaning. "Reality," thus, is a "social construction." Members of an organization are not engaged in an act of "finding" an organizational identity, but are rather engaged in an ongoing process of identity creation through their acts of sense making.

From this perspective we began to explore the meanings and interpretations of their organizational experiences held by individual members. The strength of the phenomenological approach was its ability to illuminate the particular, specific, and fluid meanings which members attached to various organizational processes they experienced. Thus, as our analysis progressed we examined ways the differential enactment of organizational processes (hiring, evaluations, training, control, and decision making) and the nature of work (routine, non-routine) as understood by organizational members contributed to the construction of contrasting collective identities.

Hence, while institutional examination of organizational processes and structures as distinct objects points out the similarities between the two organizations, phenomenological accounts of individuals' experience of these processes and structures provide a multiplicity of meanings, and thus, an explanation for the differences we observed between the two organizations. In sum, our purpose is to explore the concept of collective identity and describe the processes that have led to the creation of the distinctive, recognizable collective identities we have observed at Grassroots and Copyserve. First we examine the structures, organizational inputs and processes the two groups share. We then explore the divergent enactment of organizational processes through which organizational members have created, and continue to create the distinctive collective identities of Grassroots and Copyserve.

Collective Identities

Existing as they do within a common institutional framework, Grassroots and Copyserve exhibit considerable similarities in organizational inputs, structures and processes. Grassroots and Copyserve are composed of members drawn from a common pool of undergraduate students,

and are connected to the university bureaucracy through a common "linking pin," the University Entrepreneurship Center (UEC). The members of both groups are similar in age and developmental stage. According to Karen, the coordinator of the UEC for the past eleven years, many of them are on their own for the first time, relatively free from parental influence or control. They exhibit a confident attitude in the face of challenges: "We can do it on our own!" is a typical response of group members. This attitude notwithstanding, Karen and the other staff of the UEC offer a number of resources to all the student businesses, including group process training, office space, and accounting support. The UEC also encourages interaction and cooperation among the businesses through their members' joint attendance at training sessions and participation in an umbrella "Board of Student Entrepreneurs" which is designed to represent and advocate the interests of the student businesses to the larger university system. Karen is not only the supervisor of and advisor to the student businesses, but also appears to be their "spiritual leader," the guardian and transmitter of their histories and a self-avowed champion of collective organization.

Thus, as a consequence of structural isomorphic forces Grassroots and Copyserve are similarly organized as collectivist-democratic organizations, and appear to exhibit many of the characteristics that distinguish such organizations from bureaucratic forms (Rothschild-Whitt, 1979.) First, rejecting position-based authority, they locate authority in the collectivity as a whole. This can be seen in the institution of the consensus-based "all-staff meeting", at which the entire membership of each group meets in order to consider "proposals" for policy changes, major purchases and to supervise the activities of the organization's operating committees whose members are chosen through a process of self-nomination and election by the all-staff meeting.

Also consistent with a collectivist-democratic form of organization there exists no formal hierarchy of positions within the groups. Each member is a "worker-manager" who is responsible to all the other "worker-managers." This is often expressed by members of both organizations as "There are no bosses here!" which is reflected in both groups' use of a self-report system in controlling lateness and a peer-appraisal performance evaluation process. Both organizations rely on individuals' honesty and willingness to cite themselves for tardiness on their shifts, as exemplified by Grassroots' "Spot Policy" and Copyserve's "Dot Policy". Those with excessive "spots" or "dots" are asked to explain their lateness to democratically appointed committees and make plans to work out a compensatory "contract." Similarly, performance appraisal is accomplished non-hierarchically through the "evals" process, whereby once each semester the members of each group participate in their own daylong forum to provide one another with performance feedback. The "evals" experience has been described by members of both Grassroots and Copyserve as rewarding, emotionally intense, anxiety provoking and tiring.

Third, compensation is basically egalitarian, with differentials based only on seniority within the group ("new" first semester or "old" member). An additional criterion determining compensation at Grassroots is the number of committees on which the member serves.

Fourth, formal organizational processes are designed to encourage appreciation for the "whole" person. This can be most readily seen in the practice of punctuating meetings with "Opening Words" and "Closing Words" from members. Meetings begin with each member greeting the others, and communicating whatever personal information about his/her day's activities, problems, experiences, etc. the member chooses to share. They close with members sharing their feelings about the meeting.

In summary, we found both organizations "sharing" various aspects of collective identity associated with (a) common access to institutional resources and leadership, and joint

participation in training; (b) a sense of being "different" from the "regular" hierarchical/bureaucratic businesses that abound in their task environment (represented by the University as well as by the restaurants and copy stores on campus and in town); and (c) a set of collectivist-democratic structures and processes that provide both Grassroots and Copyserve with a common organizational framework.

Contrasting Identities

As we have seen, Grassroots and Copyserve have many common structural features that, we have argued, have led to similarities in the collective identities experienced by the members of the two organizations. An explanation for the differences between their collective identities can be found in actual organizational processes such as *staffing*, *training*, *control* and *decision-making* as enacted within each organization, and in the *nature of the work* itself that is performed by the members of each group. Each of these processes will be examined to reveal how individuals within each collective have come to understand and enact them in quite different manners.

Staffing: Through attracting and choosing new organizational members, the staffing process serves a critical function by conveying key organizational values to prospective members while allowing for the assessment of "fit" between these prospective new members and the organization. Organizational values can be transmitted through the organization's recruitment literature, its choice of recruitment sources, information contained on the application, and the selection process itself (O'Reilly, Chatman & Caldwell, 1991). Specifically, staffing processes are intended to ensure that the organization chooses the "right kind of people".

In both Grassroots and Copyserve, staffing is handled by the "hiring committee," which has responsibility (as conferred by all-staff) to process applications and conduct interviews at the beginning of each semester to ensure adequate staffing. Given the limitation of membership to undergraduate students, both organizations experience considerable turnover of their workforces at the end of each semester with the exit of graduating members.

While recruitment is accomplished similarly by the two groups (due, at least in part, to their limited pool of potential applicants) through the posting of notices on bulletin boards and the efforts of current members to recruit their friends, selection, and the selection interview process are enacted in very different manners. In both organizations, applications are screened by the hiring committee. The surviving candidates are interviewed by the hiring committee as a panel. At Copyserve the key to "fit" is generally seen in the individual's previously acquired skills and experience. Selection interviews at Copyserve focus on the applicants' possession of technical skills for the "copy side" and artistic ability and design experience for the "design side." Interview questions tend to pose scenarios hinging on the solution of technical problems in an independent manner. A typical question might be "What would you do if you were alone on shift, there were a line of customers out the door, and the copier broke?" Less attention is paid to pre-existing "personality characteristics," according to members of the hiring committee. As one hiring committee member explained, the person's "personality" is not so important, because "people grow in Copyserve...they even change their personalities."

At Grassroots, by contrast, interviewers pose scenarios focusing on the management of interpersonal relationships. Tricia, a soon-to-graduate steering committee member, reports having been asked "How would you handle it if someone on your shift just wasn't doing his/her job properly?" Jim, a first-semester apprentice was asked: "What would you do if you had a

problem, or you noticed that someone wasn't performing up to par? How would you handle it?"

He believes his answer was significant in his being selected:

First I'd approach the person, individually, and just bring it up kind of lightly, like 'How do you feel about this?' Ask them, like if they're having trouble or, you know, basically approach the person. And if that didn't work, then bring it to ...a group or a committee - this is before I even know what an all-staff was or whatever. I was just like 'I'll bring it to the group.'... I think they liked that...

In summary, members of Copyserve tend to look primarily for technical skills and previous experience and to pose scenarios focusing on independence and ingenuity in the solution of technical problems, while members of Grassroots concern themselves with interpersonal relationships and the effective resolution of problems among interdependent members of the group.

Training: Training of new-hires is intended to bring those individuals "up-to-speed" by helping them acquire the skills and knowledge necessary to allow them to function on the job. On-going organizational training is focused on maintaining or increasing individual organization members' skill level and breadth of knowledge of the work of the organization. Members of Copyserve and Grassroots experience quite different forms of training as well as contrasting emphases in the content of that training. In Copyserve the focus of training is on the technical aspects of the job: operating the cash register, computer, and photocopier. New members participate in cash register training and are exposed to a series of independently structured tutorials (designed by former members) intended to generate familiarity and competence working with the computers and photocopiers. While the technical aspects of new-hire training are also performed at Grassroots, the context in which they are introduced is quite different, focusing on teambuilding rather than independent learning. As one member recalls:

[There were] 14 of us...There were 4 people on the training team. We had to fill some paperwork out, obviously.... And then we went in the kitchen. They told us about the history, and that was good. We made honey mustard dressing.... They showed us how to make it, like one part mustard, one part honey, and this and that. We made that. Another group made...beans and rice, and another group made the salad, and we took a tour to the loading dock...Took a tour of the kitchen...like where everything was...we all came together ...an hour or two later...We came together and we ate, and we all brought the food, we all set up the food on the table...and we sat down at the table where we first came in. It was more comfortable. Very much more comfortable, like people were starting to talk amongst themselves...and we ate...It was good.

Thus, while training for new members of Copyserve emphasizes the independent acquisition of necessary technical skills, training for Grassroots recruits, while accomplishing the transmission of necessary "survival skills" (e.g., Where is the dumpster to which I'll have to take the trash?) and the modeling/trial of specific job skills (e.g., How do we make the rice?) has an additional outcome. New-hire training at Grassroots creates a feeling of "community" or "family." The training format of working together, and then sitting down to share the fruits of those joint endeavors provides a powerful introduction to the cooperative, interdependent nature of the work roles members will be performing.

Ongoing training also differs in emphasis between the two organizations. Whereas technical skills appear to receive constant emphasis throughout one's tenure at Copyserve, at Grassroots the technical aspects of training are quickly complemented by interpersonal process training (meeting facilitation, shift facilitation, group decision making). The need for members to appear technically competent on the job following training was apparent in our observations at

Copyserve. A member of Copyserve sums up the feelings often associated with acquiring this competence:

You don't wanta ask questions cause the person who got hired with you isn't asking questions anymore and he or she may be just as shaky on what they're doing but it's just ... it's that feeling in the group that your training wheels are off now and that's the pressure...that you have to learn to just be independent in the organization.

While Copyserve members transmit the value of independence through their training processes, Grassroots training conveys the value of interdependence:

It's more than just a job. It's kind of like having a baby...It's like a family and a small child. Everyone has a responsibility. As a whole. Not as individual parts...

Much of the learning by members of both organizations takes place through observation, both informal, and as a formal program of "shadowing" senior members of the groups. Observing the behavior of senior members is an additional way that neophytes are introduced to the "collective identity" and underlying values of the group. One member of Copyserve described his own observations and reactions.

Sally would just go about her business, like she was independent, like she was taking care of the group's business but she was doing it independently, like she knew what she had to do and went and did it no questions asked--nothing, and then I saw Jane (also hired at the same time) starting to do that and I was like O.K. maybe I should just try and push all the buttons on the copier or I'll just try to handle this RSO card by myself...I have to learn how to do this by myself... it's like you have to individually decide to take on stuff and you can only do that if you're independent enough to do everything by yourself.

Independence is valued as a positive force for learning, as another Copyserve member suggests:

I mean you learn how to do things. I can design a flyer, I can fix the photocopier, I can do the bookkeeping, and work the computer...I mean it forces you to learn how to do everything.

The ongoing learning process at Grassroots takes place in the context of an informal hierarchy of experience. Teaching, modeling and sharing organizational knowledge are seen as part of the role of the senior members:

Even though it's a collective, certain people have been there longer, and have to...help other people learn how to run the collective before we leave...We want to give everyone as much information as possible, so that they can run the collective on their own, and then they'll do the same thing.

So, while members of both Copyserve and Grassroots learn by observing and modeling behaviors of senior members of their groups, what they learn is quite different.

Control: Control of organizational members' attendance is accomplished through each organization's "Dot" or "Spot" self-enforcement policy. At Copyserve, however, there is a generalized belief that no one will ever get fired, the final action prescribed for repeat-offenders.

You would never get fired from Copyserve ... Somehow they find some redeeming factor in you and make you part of the group, and an effective part of the group. It's like a family, you never get turned away. You never get turned away.

By contrast, we witnessed the process by which a member of Grassroots was terminated. William had accumulated sufficient "spots" to be called before a meeting of the steering committee, where the members tried to impress on him the seriousness of his behavior. They asked him to explain his excessive and repeated lateness and lack of responsibility while "on shift," and attempted to set up a plan whereby he could work his way back into honorable standing. William did not comply with this plan, and a proposal for his termination was shortly brought to all-staff meeting. At the all-staff meeting, this proposal was discussed. William was given the opportunity to defend himself, and all members who wished to do so had the opportunity to express their opinions, and in many cases, their strong emotions. After a lengthy discussion, members voted. Several individuals "stood aside," neither supporting the proposal to terminate William nor blocking it. Nobody blocked (vetoed) the proposal, and so William was terminated with two weeks' notice. Tricia, who supported the proposal for his termination, commented:

I think towards the end, maybe, like recently, like since he's been fired he's really trying to get the idea of a collective...I think that he really learned something from us firing him. I think that was the best thing we could have done.

This comment (which begs comparison with parental explanations such as "I did it for your own good" and "I did it because I love you") points up the metaphor of "family," which is frequently invoked by the members of both groups. There is much to suggest, however, that the nature of "family" experienced by members of Copyserve differs from that experienced at Grassroots. Where Copyserve might convey family support through an unwillingness or inability to "set limits" on its members, Grassroots seems to convey a form of family support which, when enacted suggests "we love you enough to say no and to set firm limits." When an individual is unwilling to abide by those limits, the group is willing to resort to termination. Over the past five years, at least six people have been dismissed from Grassroots, while no one has been fired at Copyserve.

Recent discussions at Grassroots about the possibility of installing a time clock to help control lateness echo a similar proposal made at Copyserve two years ago, and while both proposals were handily defeated, their mere existence suggests ongoing disagreements surrounding the most appropriate method for internal control. Copyserve's members have adopted a variety of rules and policies regarding members' use of different machines, while Grassroots' members have traditionally relied more on unwritten, internalized norms of responsibility to the group as a whole as well as to other members to govern individuals' conduct. At least one member of Copyserve feels threatened by the group's efforts at control:

The best you can hope for and what you would want is for people to police themselves...It would be everything against what Copyserve is if you try to, it would do too much damage to almost like censor people, to hold them to such strict regulations that would cut off their independence so they could do things, and for them to maybe even blow something off because then, you take outa the equation the whole spontaneity of it...trying to regulate the whole spontaneity of work.

Ironically, Grassroots members have been recently rewriting their "Spots" policy to add additional formal steps and procedures, in an effort to gain control over certain members who seem to be increasingly immune to the collective's traditional internalized controls.

Decision Making: As previously discussed, decisions in collectivist-democratic organizations are generally taken by group consensus (Rothschild-Whitt, 1979.) The weekly two-hour all-staff meetings held by both Grassroots and Copyserve are venues at which the groups' formal processes of decision-making can be observed. Attendance is required for all members, who are paid their regular hourly wage for the time thus spent. For Grassroots members, attendance at all-staff is seen as critical in order to keep abreast of the group's functioning. When apprised of our research interest in their organization, members consistently recommended that we be sure to attend all-staff meetings and stated that all-staff would be where we would see how Grassroots "really works." By contrast, at Copyserve all-staffs serve as a time and place to recap and disseminate important decisions that have already taken place. To be "in the know" and a decision-maker at Copyserve is connected to being present during numerous work shifts, at which times decisions are reached.

Being there for a lot of copy shifts is the most important thing in Copyserve. You could do nothing and be there every day at least four hours a day and you would know everything that goes on in that business, but if you were to go to maybe just a steering meeting or an all-staff meeting you would have no idea of what happens during the week.

Whereas at Grassroots decisions made at all-staff influence the daily operation and functioning of the business, at Copyserve decisions made during the daily operation of the business are generally recounted during all-staff for the benefit of those not yet aware of the emerging policy. At Grassroots policies tend to be decided upon and flow from the all-staff toward daily operations, while at Copyserve policies tend to emerge as results of individuals' daily experience of trial, error and problem solving. These policies are subsequently "published" at the all-staff.

We have seen that all-staff meetings serve different organizational purposes at Grassroots and Copyserve. Next, we shall examine the differing ways in which the two collectives enact the processes of the all-staff. All-staff meetings at Grassroots and Copyserve have similar structures. The meeting is led by a member who acts as "facilitator." He or she is assisted by a note-taker, a timekeeper and a "stacker" who maintains a list of members wishing to speak on a particular issue and calls upon them in turn. The format for the all-staff begins with "Opening Words," also known as a "go-around." Each group member is supposed to greet the others, and connect with them by sharing some personal experience, thoughts, and feelings. The all-staff format ends with "Closing Words," another opportunity for each group member to directly address his/her comembers and take their leave. In-between are sandwiched the "business" of the meeting, including committee reports, follow-up on old business, and "discourse," time devoted to members' speaking out about the problems and issues listed on the meeting agenda. Particularly revealing of the differences between Grassroots and Copyserve is the enactment of "Opening Words" and "Closing Words." In the course of our observations at Grassroots, these were always completed, even when the meeting was running extremely late, and the members appeared to be desperate to leave. "Opening Words" was often, although not universally, used by members as an opportunity to connect with one another.

My life is in shambles, and this (Grassroots) is the only structure I have. We had to put my dog down this afternoon. I'm sorry I was late for my shift today, but I just couldn't get over it. At Copyserve, by contrast, our observations revealed that "Opening Words" and "Closing Words" were frequently omitted altogether, or paid only cursory lip service by the majority of members. During one all-staff meeting, for instance, discussion of business related issues proceeded for more than 30 minutes before one member queried, "We forgot to have go-around, didn't we?"

DISCUSSION

At least two major themes emerge from our research. The first concerns the relationship between *collective identity* and the *self*. The second concerns the relationship between *collective identity* and the enactment of organizational processes.

Understanding the relationship between collective identity and the self is critical for, as we suggested earlier, collective identity is as much an individual level phenomenon as it is a collective phenomenon. The relation of the self to the collective has been of interest to researchers for over a century. Over the past twenty years the question of principal interest has shifted from "How do individuals behave when in groups?" to "How do groups behave within individuals?"(Miller & Prentice, 1994). This shift reflects the efforts of social identity and self-categorization theorists to place the collective inside the heads of individuals rather than somewhere external to them. These theorists contend that the particular social categories with which an individual identifies him or herself have a profound impact on his or her psychological functioning (Miller & Prentice, 1994).

In order to theorize the relationship between the individual self and a collective identity in which that self participates, we must first examine the concept of "self". The self can be viewed as "the concept of the individual as articulated by the indigenous psychology of a particular cultural group...The self embodies what the culture believes is humankind's place in the cosmos: its limits, talents, expectations, and prohibitions." (Cushman, 1990: 599). Thus, the concept of self exists not as a transcultural, transhistorical, unchanging structure, but rather as a local, historicized, fluid social construction. The particular concept of self that was constructed by North Americans in the modern, post-World War II period was characterized as individualistic and self-contained. Geertz's description is quite graphic:

The Western conception of the person [is] a bounded, unique, more or less integrated motivational and cognitive universe, a dynamic center of awareness, emotion, judgment and action, organized into a distinctive whole and set contrastively against other such wholes and against a social and natural background (Geertz, 1979: 229).

The consequences of this concept of self for North American individuals of the late 20th century have been significant. The self-contained individualistic self has been described as "empty" of family, community, tradition and shared meaning, experiencing this emptiness as a "chronic, undifferentiated emotional hunger" (Cushman, 1990: 600). Evidence of this emptiness and emotional hunger has been detected in many of the "popular" problems of our day, such as low self-esteem, eating disorders, drug abuse, religious "cult" membership and even chronic consumerism. All of these ills can be interpreted as attempts by the individual to "fill up" his/her inner emptiness.

With this particular understanding of the late 20th century North American self, we can resume our discussion of the relationship between individual self and collective identity. It is our view that members of an organization can, given appropriate circumstances and through

particular processes, jointly construct a collective identity which will serve to "fill" their "empty" individual selves -- at least partially -- by creating and providing family, community, tradition, and shared meaning. One of the distinguishing features of the Grassroots collective identity appears to be the extent to which it enables its members to fill the self in this manner. In particular, experience of family, community and rich symbolic traditions make a common contribution to the construction of individual selves within the organization. In contrast, the collective identity at Copyserve provides a considerably wider range of inputs, encouraging greater variability in self-construction. Juxtaposing two Copyserve members' comments is illustrative:

I mean Copyserve is me and I'm Copyserve, I mean it's your business, it's my business...it was central to my career here, to my student career.

When I walk out the door at the end of my shift, I leave Copyserve behind, I'm just Maureen now.

In sum, the collective identities constructed by members of Grassroots and Copyserve offer different "ingredients" for the "filling up" of individual selves. Further, there is considerable individual difference in the manner and degree to which collective identity comes to influence the self-construction of members.

The second major theme that has emerged from our research concerns the relationship between collective identity and the enactment of organizational processes. Specifically, it appears that the enactment of organizational processes exerts a strong influence on the nature of collective identities created and sustained. The salience of independence in the work environment of Copyserve stands in contrast to the salience of interdependence in the work environment of Grassroots. The pervasiveness of independence can be seen at Copyserve in the selection process, control processes, and in the nature of the work itself. Independence is sought by new members as a means to display their newfound competence to other members. Control, decision-making, and authority can be seen to reside in those individuals who have "taken on the most". Finally, the reliance on technology inherent in work at Copyserve serves to encourage independence. Whether one is designing a new flyer, or making 10,000 copies, the end product reflects the interaction of a singular individual with a machine. In addition, the work requires people to "think on their feet", a process which leads to the development of policies and procedures which may differ significantly from shift to shift. The salience of independence throughout Copyserve is evident in the overwhelming task focus apparent in their daily operations.

In contrast, Grassroots' collective identity is tied very closely to the notion of interdependence. This interdependence seems to flow from those same processes of selection, control, and the nature of work, which contribute to the independence so prevalent at Copyserve. The "breaking bread" conclusion to new-hire training and the "opening words/closing words" rituals provide stark contrasts to the individual level training regime and cursory and inconsistent "go-around" which characterize Copyserve's all-staff meetings. At Grassroots, individuals are selected and evaluated largely on the basis of their ability to work well as team members. The washing, cooking, serving, and cleaning that take place consistently every day provide a work context, which, while requiring a certain level of independence with respect to task accomplishment, demands a high degree of interdependence. Further, the monotony and physical exertion inherent in their repetitious tasks are balanced in their experience by their feelings of warmth and connectedness to the group.

In sum, interdependence is as valued among the members of Grassroots as independence is among members of Copyserve. These divergent values are revealed through the ways in which the members of the two organizations enact the organizational processes we have described, and have had a significant impact on the construction of substantially different collective identities.

CONCLUSION

How, then, do we see the relationship between collective identity and the self as it is manifested in these two organizations? Organizational theorists' exploration of this relationship defines two polar extremes. At one pole are those theorists who see organizations as reified and ahistorical entities, crucibles of personality and performance where organizational members are molded, where the relationship between the organization and the individual is a unidirectional process of shaping and aligning. This positivistic, functionalist view informs a large section of traditional organizational scholarship, and indeed, many of the Human Resource practices of organizations.

At the other pole is the pure phenomenological perspective, which posits a near-solipsistic view of organizations as entities that exist purely in the minds of their constituents, where "collective identity" might be conceptualized as an ephemeral conjunction among individuals' experiences and interpretations.

Our examination of Grassroots and Copyserve, however, leads us to theorize a far more dynamic relationship. While the two organizations share a variety of structural characteristics, resources and constraints on their operations, their significant differences in terms of technology and their members' enactment of organizational processes have contributed toward the development of unique "collective identities". What we observe are organizations that manifest complex and dynamic identities, identities that are being constantly renegotiated in the course of a dialectic exchange among the group and its members. This dialectic contributes towards the creation of identities, both individual and collective.

What then, is the fundamental contribution of this research to issues of organizational identity and learning? We believe that our exploration into collective identity provides two points for reflection. First, by investigating collective identity through a study of two apparently similar organizations, we were able to recognize and report on those issues of identity that emerged by contrast. In the positivistic language of mainstream organizational scholarship, our research design allowed us to "control" for a number of "variables" leaving us free to notice and then theorize the differences between the two organizations' collective identities. This investigation led us to appreciate the reciprocal and dynamic nature of the relationship between collective identity and the self.

The second point of reflection flows from the *negotiated* nature of organizational identity and its linkages with older individual subjectivities that have been influential in shaping the organization. Any radical attempt at "reshaping" organizational identity is bound to encounter this heritage of the organizational past.

The study of identity and identification in organizations continues to be an important element of organizational studies. With our study, we have made a simultaneous analysis of processes of identification *with* organizations and *in* organizations (see Lok & Willmott 2014, to note the importance of this simultaneity). In doing so, we have hopefully advanced the study of the dynamics of organizational identification, through the interplay of collective and contrasting

identities. It is our belief that organizational identity is shaped primarily through these dynamic interactions of inside and outside forces.

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