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## LETTER FROM THE EDITOR
Lisa Appeddu

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I am writing this letter from our 2nd annual conference, “Seizing Opportunities.” As I listen to the presentations and meet the people who are participating in this year’s conference, I am once again inspired by what this journal represents and in what direction it is evolving.

This journal welcomes papers on administrative issues from all disciplines. We have submissions from business, of course, but we also have authors who write about challenges and strategies for facing those challenges in fields ranging from health care and psychology to technology, from public policy to education (including K-12, undergraduate, and graduate levels). This multi-disciplinary approach enriches all of us, and I would like to thank all of you for making my job of reviewing an interesting one!

In our second year of publication, the AIJ board is taking steps to become more transparent and streamlined in our submission process. Recently, we made the decision to employ Allen Press, Inc., for our submission and review process. Submitting authors and reviewers will be able to do everything in one place: submit, track papers through the review process, go online to review papers, and communicate with us. This vehicle will also enable us to communicate with our authors and reviewers in a more timely and effective manner.

The AIJ board is also enhancing its multidisciplinary approach by welcoming Frederic Murray to the Editorial Board as Editor-at-Large. Frederic is an Assistant Professor and Instructional Services Librarian at Southwestern Oklahoma State University. He is extremely well-read in a variety of disciplines, so he brings a valuable perspective to the board on the timeliness and appropriateness of resources and topics. Readers will get to know Frederic better in the next issue, when he will be presenting the letter from the editor.

I have been very pleased with the direction in which this journal is evolving. We are constantly evaluating our processes, taking into consideration readers’ valuable input as we strive to optimize the potential of this journal. In turn, we challenge our readers and writers to seize opportunities—in classrooms, in research, and in the scholarship all of you contribute to the AIJ.

Sincerely,

Lisa Appeddu
Research Editor
The AIJ editorial board constantly looks for ways to keep the journal professionally relevant. With this in mind, we approached Dr. Michael Williams, Associate Dean of the MBA Program for the School of Business and Technology at Thomas Edison State College, about writing an introduction to our 2012 conference theme, Seizing Opportunities. Dr. Williams is a scholar-practitioner who offers a unique philosophical insight into the import of seizing opportunities in our professional and personal lives. He was excited about exploring the theme for this issue through the lens of change as a nexus of opportunity. We hope you find this special invitation section both useful and inspiring.

Suddenly, you realize your life may never be the same. An opportunity has been presented. Be it planned or serendipitous is unimportant. What is important is your perception of its power and potential to influence your life. Its presence may stimulate a rush of new ideas or conjure up associated past experiences and outcomes. For a moment, your world may be filled by a creative tempest rich in possibility and full of self-discovery, your personal and professional power unleashed. In a moment of clarity, you may find yourself thinking differently, rationally and innovatively uncompromisingly aware of emergent life themes grounded in your perception of the opportunity.

Increasingly, you become aware of your tolerances for risk, reward, and investment. Gradually, the momentum of this perceptual experience slows, and degrees of situational normalcy return. However, your experience with the opportunity is not done; rather, the opportunity is not done with you. Through its consideration, you’ve changed—nuancefully-altered, perhaps transported toward a new possible self. The opportunity’s power and potential to influence how you think and behave may have taken root. You are not the same person you were prior to the opportunity’s presentation. You realize your life will never be the same.

Opportunities can be at once disarming and exhilarating; their content elegant, profound, and disturbing. Opportunities provide openings for decision, decisions predicated on the quantity and quality of data associated with an opportunity. For example, opportunities can present as partially defined, undeveloped fragments of an emergent product concept or a robust and refined business plan ready for implementation.

Regardless of their presentation, opportunities prompt us to make decisions, and the result of our decision or indecision will be change. Each opportunity that presents to us brings with it contexts-of-change. Contexts-of-change are potentials, unique alignments between an opportunity and our knowledge and skills that, if properly used, can enable us to benefit from engaging the opportunity. Again, for example, if we decide to seize a business opportunity, we may gain a marketplace competitive advantage by leveraging the unique alignments between the opportunity and our knowledge and skills at business building. However, if we decide to reject or not to make a decision concerning an opportunity, it may remain viable and available to others. If so, the opportunity could pass from our context-of-change. In its passing, we would forfeit its unique alignments with us. It then may present to others, making pos-
sible its engagement within their context-of-change.

Opportunity stimulates change. Change can be rapid, discontinuous, and noisy. With its motion and clatter, change can distract our attention from evaluating the merit and value associated with an opportunity. Moreover, in order to decide to engage an opportunity, we need to gauge its power and potential, understand the accompanying risks, rewards, and investment necessary to realize a desired result, and assess whether the opportunity’s context-of-change is uniquely aligned with our capabilities. Therefore, we must be receptive to opportunities in our lives and be reflective concerning the challenges and benefits they present. As the proverb states, Outside noisy, inside empty. Avoid cacophony. Seek quietude when deciding to engage an opportunity. Your decision could influence the direction and outcomes of your life.

CHANGE: ARCHITECT OR VICTIM?

In his 1992 book Managing at the Speed of Change, change author Daryl Connor asserted that “Change provides us with the opportunity to architects or victims of our own future.” Change highlights potentials inherent in opportunity. Frequently, opportunity serves as a medium for potential: an environment in which environmental stimuli, desired outcomes, and unanticipated elements interact, combining to form an amalgam of possibility and alchemy of change. As Conner indicates, “change provides us with opportunities,” calling for our decision and action. For example, we can decide to accept or ignore, chase or seize opportunities. The potential we perceive in opportunities influences the efficacy of our decisions. Perceptions are subjective. They are influenced by emotion, bias, and limited information. Our perceptions influence our belief systems. Our belief systems are the final arbiter of our decisions concerning how we address opportunity.

Belief systems are complex and influential. What we believe about an opportunity may spur us to seize it. Seizing is a powerful and determined act that may be defined in many ways. For example, seizing can be interpreted as “taking by force,” “lay hold of suddenly,” and “to understand fully and distinctly” (Merriam Webster Dictionary). When seizing an opportunity, we frequently “take it by force.” Unfortunately, we may not fully understand its power and potential to irrevocably alter our lives.

Culturally, seizing opportunities has been portrayed as a daring endeavor; ripe with passion, commitment, and purpose. In contemporary culture, seizing opportunities in our personal and professional lives is bannered in the phrase “Carpe Diem” or “Seize the day.” This phrase was made famous in the 1989 film Dead Poets Society, when English teacher John Keating exhorted his students to “Seize the day, boys. Make your lives extraordinary.” In the movie Keating entices his students with “Gather ye rosebuds while ye may. The Latin term for that sentiment is Carpe Diem... Seize the day.” Why does the writer use these lines?” Keating continues, “Because we are food for worms lads. Because, believe it or not, each and every one of us in this room is one day going to stop breathing, turn cold, and die.”

Keating’s enticement, “Gather ye rosebuds while ye may,” is the opening line of the 17th century English poet Robert Herrick’s poem, To the Virgins, to Make Much of Time. In his poem, Herrick advises to seize life while young and full of life:

Gather ye rosebuds while ye may,
Old Time is still a-flying;
And this same flower that smiles today
Tomorrow will be dying.

Herrick’s stanza draws upon the work of Roman poet Horace (Quintus Horatius Flaccus, 65-8 B.C.E.), who wrote in Book I of his Odes (35 B.C.), “Even while we speak, envious time has passed: seize or [pluck] the day, putting as little trust as possible in tomorrow!” While this phrase is articulated in many ways, its sentiment is clear: Seize the day; seize the opportunity.

Once seized, an opportunity is ours to develop, expand, and manage. Connor indicates that we can choose to be “architects or victims” of our decision to engage. While a seemingly simple decision, its ramifications can be far from simple. As the time-worn axiom warns, “What we don’t know can harm us.” Frequently, at the time of our decision to
seize an opportunity, we do not possess a full understanding of how the opportunity might change our lives. However, as often happens, as we engage and shape the opportunity, it develops a character and momentum. It becomes animated, taking on a life of its own within or outside of our control. With animation comes change. Again, Connor reminds us, “Change provides us with the opportunity to be architects or victims of our own future.” Which will we choose?

CULTURE, CHANGE, AND COGNITION: COACHING

There are a plethora of variables that influence the formation and emergence of opportunity. Three variables common to opportunity are culture, change, and cognition. Opportunities are culturally generated. Organizational cultures are tantamount to social and situational crucibles. These cultural crucibles are fueled by psychological, sociological, and anthropological dimension of culture. Culture supplies and fires the properties of opportunity and decision, making forging them into a unique composite of organizational thought and potential. Change contextualizes opportunity. It provides context for opportunity enabling it to evolve while introducing influencing variables such as randomness, order, and chaos. Cognition operationalizes opportunity. How and what we think about opportunities influences our behavior and ultimately the viability of results.

Culture, change, and cognition are critical variables influencing the conception, formulation, and acquisition of opportunity. However, while these variables are necessary to enabling opportunity to present to us, once we decide to seize it, they may or may not assist us in realizing its potential. As president Abraham Lincoln wrote concerning opportunity, “I will prepare and some day my chance will come.” A recognized and recommended component of “preparing for chance” is coaching. Given the complexity of the 21st century global business environment, having a trained and seasoned coach helping to maximize the yield from an opportunity, in turn helping us realize our desired goal, can support our decision to seize an opportunity.

Beginning in 2008, Esther Muller, a Board Certified and Master Coach and I have been writing the Coaching Corner articles for The Mann Report-Residential real estate magazine published in New York City. In 2008, the nation was entering a prolonged recession. Financial markets were in turmoil, real estate prices plummeting, and mortgage lending contracting. As a result, real estate consumer fear escalated, and residential home transactions ground to a halt. These market conditions signaled the end of an era in the residential real estate industry, a period characterized by ever-rising prices, scarce inventory, and ample consumer capital and credit. From the fiscal crisis and recession of 2008, a new order of industry engagement emerged. Real estate professionals were now challenged to survive, succeed, and sustain working in an industry that was rapidly morphing into a new and uncharted professional landscape.

Culturally, organizational cultures were fragmenting under the stress of fracturing and wholly upended market conditions. No longer did the rules of organizational and client engagement used only weeks before apply. Instead, rules were replaced by no rules. Change, rapid and discontinuous, overpowered or derailed most institutional and government leaders’ attempts to manage or control the escalating chaos characterizing the residential real estate market conditions. Cognitively, the magnitude and relentlessness of the changes in the global financial markets were difficult to comprehend, in turn significantly inhibiting leaders to make informed decisions and take decisive corrective action. Professionals in all industries appeared to hold the expectation that organizations’ ability to cope with the world’s economic and banking systems issues would either be seriously crippled or completely paralyzed by the events constituting the financial crisis.

As a result, critical thinking was in high demand. Organizational leaders were challenged to analyze, synthesize, and evaluate the causes and impacts of the financial crisis and formulate strategies and tactics to mitigate its projected debilitating effects and provide their companies and institutions with stability and hope. Opportunity has been a central theme in the articles series. Article titles such as “Cultures of Competence: Coaching as Catalyst” (January, 2011), “From Learn to Do: Cognition and Learning” (March, 2012), and “From Evolution to Revolution: An Industry In Transformation” (January, 2010) explored opportunity—its presentation, seizing, and impact.

The 2012 Administrative Issues Journal Conference theme was Seizing Opportunities. Many of the Coaching Corner articles address this year’s conference theme from a variety of perspectives. In the overview to this year’s conference, Editor-In-Chief Dr. Tami Moser informed us that the conference leadership “explored the potential interpretations of
this broad theme [Seizing opportunitIES.]" She suggested that “Individuals involved in teaching may want to explore year’s AIJ conference theme in terms of seizing opportunities for their students, institutions, and themselves.” Increasingly, institutional leaders are employing individuals possessing critical thinking and entrepreneurial skills, believing these employees are better prepared to access and seize opportunities, in turn promoting business growth and enabling competitive advantage. It is in the context and spirit of “exploring the potential interpretations of this broad theme,” Seizing Opportunities, that I am presenting three Coaching Corner articles that provide unique interpretations of Seizing Opportunities with emphasis on culture, change, and cognition. The articles are “Courage As Catalyst” (June, 2012), “Opportunity as Transformation” (November, 2011), and “Succeeding to Fail: A Path to Transformation” (November, 2011).

As Dead Poets Society’s English teacher John Keating reminds us, “Carpe Diem. Seize the day.” By seizing the day we may find ourselves the architects, not victims, of our own future,” in turn creating the opportunities to fulfill Keating’s challenge to “Make our lives extraordinary.”

REFERENCES


Michael Williams, Ph.D. (michaelwilliams4@comcast.net) is the Associate Dean of the MBA Program in the Thomas Edison State College School of Business and Technology. Prior to his appointment as Associate Dean, he held positions as the Dean and Professor of Business Management of the Touro College Graduate School of Business and faculty chair for graduate programs in human resource management, leadership, and organizational development in the Capella University Graduate School of Business and Technology in Minneapolis, Minnesota. Dr. Williams’s professional background blends 20 years of executive leadership in global business organizations and higher education. He is a successful entrepreneur, consultant, author, and public speaker.
Courage ennobles vision, promotes possibilities, and fuels action. It is a cornerstone of entrepreneurship. Courage imbues purpose and drives mission. It encourages entrepreneurs to take risks, preserve through adversity, and achieve beyond expectations. Courage is a propellant powering business-centric professionals to become pioneers and leaders. Courage encourages entrepreneurs to forsake the known and stable, revel in the potential of possibility, and embrace the probability of failure. Courage mediates our indecision associated with pursuing business opportunities and facilitates the ability to act on viable data and informed market intelligence. As English Prime Minister and author Sir Winston Churchill offered, “Courage is rightly esteemed the first of human qualities... because it is the quality which guarantees all others.”

Courage and Others

In guaranteeing all others, the others comprise a plethora of qualities that we apply in our personal and professional lives. Qualities including honesty, kindness, and fairness constitute our core competencies of societal interaction serving as catalysts for meaningful and productive interaction with others. As per Churchill, courage is the first or primary human quality; it is a core competency. It influences thought, marshals action, and stimulates innovation beyond current awareness. Courage presses us to move. It requires us to unmoor ourselves from the dock of inertia, enlist fear and doubt as allies in achievement, and commit to building our visions of the future. Courage nurtures our willingness to evolve and mandates the necessity of change. It requires our cultivating fortitude.

Fortitude is a platform for courage. Inspired by Italian Renaissance painter Sandro Botticelli (1445-1510) painting Fortitude in his 1469 work The Allegory of Fortitude, we are reminded of the power and potential inherent in courage enabling us to achieve our personal and entrepreneurial goals. In living each day, we rely on our mental toughness to compete, survive, and sustain. Fortitude fuels courage enabling us to endure disappointment, celebrate achievement, and remain steadfast to our commitments to achievement and actions toward success.

Courage of Mind

Courage flows as a consequence of thought. Our thinking defines action, in turn influencing achievement. Moreover, courage is rooted in faith, faith in our ability to encounter danger, endure adversity, and emerge wiser and more effective. Faith enables our beliefs; especially belief in ourselves. As Roman statesman Marcus Tullius Cicero wrote “A man of courage is also full of faith.” Faith informs our belief systems; what and how we believe. In their 2007 article “Toward a Courageous Mindset: The Subjective Act and Experience of Courage” published in The Journal of Positive Psychology, authors Hannah, Sweeney & Lester present a model of courage that suggests our belief in values such as integrity, honor, valor, independence, duty, selflessness, and loyalty encourage our courageousness. In addition, the
authors offer that through our belief in values, we develop “courageous states of mind” that promote courageous action. They identify four “states of mind” which enable our acting courageously:

1. Self-efficacy: Self confidence enabled by the knowledge, competencies, and skills necessary to achieve desired goals.
2. Means efficacy: Belief that the means (e.g. resources, tools, or skills) present is sufficient for achieving goals.
3. State hope: Belief that accomplishing a goal is possible, strategies and tactics for goal achievement developable, and plans to achieve a goal will be executable when necessary.
4. Resilience: Belief in the ability to recover from resistance to achievement and continue progressing toward goal achievement.

Courage In Action

Courage requires our presence in action. We must be engaged; applying skills, implementing strategies, and driving toward succeed. Courage demands personal growth from misfortune, momentum from inertia, and wisdom from failure. Courage is intolerant of excuses that inhibit our realizing full potential. Courage compels us to learn-in-the-moment enhancing our capability to achieve we want. As fabulist Aesop wrote, “It is easy to be brave from a safe distance.” Courage will not suffer substitutes for the work necessary to become courageous. We must be in-the-moment and circumstance encountering, managing, and growing in courage.

Consider Barbara Corcoran, global real estate entrepreneur and panelist on the hit entrepreneurial reality show Shark Tank. She exemplifies courage-in-action. After failing at twenty-two jobs, she borrowed $1,000 [and] launched The Corcoran Group, building it into a 6 billion dollar global enterprise. Ms. Corcoran’s courage was palpable and applied displaying vision, dominating adversity, and succeeding through achievement.

Coaches are catalysts for developing courage. Through guided reflection and scripted action, coaches can help us establish courageous “states of mind” that enable our acting courageously. Coaches can assist in increasing our self-efficacy, hope, and resilience.

Courage is a catalyst of change; coaches catalyze courage.

Get coached; get results.

Michael Williams, Ph.D. (michaelwilliams4@comcast.net) is the Associate Dean of the MBA Program in the Thomas Edison State College School of Business and Technology. Prior to his appointment as Associate Dean, he held positions as the Dean and Professor of Business Management of the Touro College Graduate School of Business and faculty chair for graduate programs in human resource management, leadership, and organizational development in the Capella University Graduate School of Business and Technology in Minneapolis, Minnesota. Dr. Williams’s professional background blends 20 years of executive leadership in global business organizations and higher education. He is a successful entrepreneur, consultant, author, and public speaker.

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SEIZING OPPORTUNITY: “OPPORTUNITY AS TRANSFORMATION”

Michael Williams
Thomas Edison State College School of Business and Technology

Esther Muller
Title


We live in the future at expense of the present. We project our desires forward and prescribe responses to yet unrevealed conditions. Living in the future enables us to explore and examine our intentions and potential outcomes. We construct our futures today. The opportunities we create and those revealed to us become portals for change; crucibles of transformation.

We create opportunities and opportunities create us. Opportunity is the yield distilled from our belief, work, and continuous evaluation if the value of what we want is worth the human price we pay. Opportunity is a product of causality between us, others, and environments. The interaction of these variables creates conditions in which opportunities for fulfilling our desires and transforming our lives reside.

The 16th century English philosopher Francis Bacon wrote “A man must make his opportunity, as oft as find it.” Is there reciprocity between our efforts to create opportunities and the randomness of our lives from which opportunities emerge? Or, is opportunity a consequence of success? As Dr. Jonas Salk, the American medical researcher offered “The reward for work well done is the opportunity to do more.” Whatever it origins and designs, opportunity enables our progress and potential.

The current economic recession has robbed professionals in all industries of opportunities. These conditions have reduced the volume and scope of professional development opportunities. However, even with this theft of opportunity many professionals have advanced, leveraging opportunities toward achievement toward transformation.

Opportunity creates conditions for achievement. Daily we learn of others successes resulting from conditions they’ve created through opportunity. Often the conditions-of-opportunity are the product of a compelling vision of the future. A future steeped possibility; rich in reward. Our visions must be operationalized in order to be realized. Mental and operational models structure our strategies and methods for achieving what we want. Explore our Opportunity Model as a mechanism for concretizing your visions.

Opportunity Model

• Learn From History—Study the past; learn from the actions of others. Find mentors-of-history. Engage in a historical mentorship. Learn from those who’ve created opportunities and conditions conducive to achieving your goals.
• Experiment With Purpose—Apply lessons learned to your visions of the future. Study causality, notice differences, construct plans, and develop skills for enabling focused, goals specific action.
• Act As If—Act as if you are what you want to become. Then, work backwards from the conditions-of-opportu-
nity you’ve created using the plans and skills you’ve developed projecting yourself into your future. Focus on transforming who you are into whom and what you want to become.

- Reflect and Recalibrate—Transformation is an internal alchemy. It is conceived, gestates, and resides within us. Reflection fuels transformation. It renders us receptive to our potential and open to creating growth opportunities. While enabling, transformation requires management; calibrating and recalibrating our thoughts and behaviors relative to our desires.

- Negotiate With The Future—Opportunities enable us to realize our futures. Once taken, opportunities quickly acquire characteristics and conditions that must be negotiated with if their power and potential is to be harnessed in the service of achieving goals.

**Transforming Opportunities**

In his *Apology*, the fifth century philosopher Socrates wrote, “The unexamined life is not worth living.” If true, then the examined life has worth. A variation of this idea is “The examined life transformed by opportunity is worth living.” English statesman and author Winston Churchill offers us three orientations toward the value of opportunity as transformative agent may be insightful.

1. “If you cannot read all your books...fondle them...peer into them, let them fall open where they will, read from the first sentence that arrests the eye, set them back on the shelves with your own hands, arrange them on your own plan so that you at least know where they are. Let them be your friends; let them, at any rate, be your acquaintances.”

2. “During their lifetimes, every man and woman will stumble across a great opportunity. Sadly, most of them will simply pick themselves up, dust themselves down and carry on as if nothing ever happened.”

3. “A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.”

**Transformation As Opportunity**

Transformation requires courage and commitment. Examine the depth of your commitment to change before embarking on journeys of transformation enabled by opportunity. Use our *Opportunity Model* as a tool for self-coaching toward realizing opportunity. Remember, opportunity can transform you. Being transformed enables new and limitless opportunities.

*Coaching can enable transformation. Get coached.*

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In failure we succeed. Our success is chronicled in increased self knowledge and discovered opportunities for growth and transformation. Failure and success are allies. They create conditions enabling us to be responsible for our decisions and accountable for results. For many, the relationship between success and failure is a mystery; a conundrum characterized by contentiousness and complexity. Success and failure share a multi-dimensional, symbiotic relationship; continuous and causal. Their interaction is powerful and potent able to fuel success or failure. A key to harnessing the power inherent in their relationship is transforming failure into a constructive learning experience. Failure is a litmus test of character. It tests our mettle and challenges our resolve to succeed. Failing offers us opportunities to become architects or victims of our own future. It provides us with the insights and experiences necessary to build character and realize our possible selves.

How can failure enable your success? Consider implementing the 3R’s of managing failure toward success.

Reflection
Reflection is an acquired capability. It requires intention and attention to develop and apply. For many, the skills associated with reflection must be learned. Often, learning to be reflective can be unfamiliar even disquieting as thoughts and actions are examined relative to new ideas and opportunities. In his 1933 book *How We Think*, the American philosopher and educational reformer John Dewey offered three orientations promoting reflective practice; *open-mindedness, responsibility,* and *wholeheartedness*. These orientations can serve as conceptual frameworks for determining if we possess these qualities associated with reflection. To test your reflective capacity, apply Dewey’s three orientations to your thoughts and behaviors in order to learn, grow, and innovate. Failing to reflect undermines success. However, successful failure yields information and inferences that can stimulate reflection. Reflection enables success. It is a reflective journey inward examining motivations, contexts, and value associated with failing. Reflection can render resolve to reengage a goal refreshed and reconfirmed. However, if reflection reveals that the activity you’ve engaged is not a calling, it is misaligned with your desires or skills, quit quickly, completely, and don’t look back. Stop investing yourself and resources in ultimately unproductive endeavors.

Resolve
Resolution is a pivot point. It is a nexus of intersecting streams of data, thought, and reflection franked with the stamp of decision and imprinted with the indicia of resolve. Reflection requires resoluteness. We must resolve to be reflective in order to strengthen our resolve, in turn generate the courage necessary to transform failure into success. British Prime Minister Sir Winston Churchill wrote “Success is not final, failure is not fatal: it is the courage to continue that counts.” Courage enables success. Being courageous enough to critically examine our failures can prove transfor-
mational. Consider the case of the British vessel HMS Resolute. In 1853 on an arctic expedition, the ship was trapped in ice and abandoned by its crew. In 1854, it was found adrift in an ice flow and in 1856 returned to Queen Victoria. In 1879, the HMS Resolute was retired and disassembled. The next year, 1880, the British government commissioned two large partner desks to be constructed from its timbers; one presented to then United States President Rutherford B. Hayes and the other given to Queen Victoria. Today, the presidential resolute desk is the center piece of the Oval Office having served every president since being received as a gift.

The HMS Resolute in name and legacy is a model of resolve. During its commission, the ship served proudly and purposefully surviving numerous challenges to its survival and success. Then, in the end when the ship was dissembled, its builders resolved that it would realize a new destiny, one with a purpose they had not foreseen 30 years earlier. It would become an instrument of state, a desktop on which presidents would sign the documents of history. The HMS Resolute fulfilled a destiny of transformation. Resolve empowers progress, fulfills destiny, and enables possible selves.

Respond

Reflection and resolve fuel response. Responding is purpose-in-action. When we determine a productive course of action in order to achieve a goal, the result may be failure. However, the seeds of future success may be present in unsuccessful action. The American statesmen and inventor Benjamin Franklin wrote “I didn’t fail the test. I just found 100 ways to do it wrong.” Franklin’s response to failure was to reflect, resolve to reengage, and respond to each wrong way in order to achieve the desired result. He forged ahead with courage and conviction; open-minded, responsible, and wholehearted. Franklin’s willingness to fail enabled his success. Reflection, resolve, and responsiveness served as beacons lighting his way toward transformation.

Harness the power and potential inherent in failure to fuel your success.
Coaching can help you traverse the path from failure to success. Get coached.

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Enhancement of Entrepreneurial Leadership: A Case Focusing on a Model of Successful Conflict Management Skills

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The purpose of this paper is to present a case study focusing on a new technology start-up firm, founded by two graduate students, an engineer and a business major, who met during their university studies. The case is timely, in that only ten percent of new product introductions result in a profitable business. The causes of failure are numerous and include the following: the market may create failure; inadequate funding and capitalization; and competition from established enterprises. Several research studies also point to rising indications of inter-functional conflict in high technology companies. One reason may be that, today, management teams in such companies are typically comprised of greater levels of diversity in age, gender, ethnicity, education, and life experiences, all of which exacerbate conflicts. New venture teams, especially in a technology start-up, may be united because of the product innovation, but they may easily become disconnected and unrealistic when it comes to the management of the enterprise.

The presentation and analysis of a conflict management process herein indicates that the way a start-up team manages its conflicts may have a permanent affect on the success of its entrepreneurial venture. Conflict management does not imply terminating conflict, but involves understanding strategies to minimize dysfunction and enhancing constructive effectiveness as a result of conflict. This case exposed the problems that arise due to the differences in the founders’ education, background, experience and understanding of the necessary entrepreneurial mindset for success. By using a model of conflict management that encompasses four negotiation skill sets, including assessment, intervention, resolution and maintenance, their conflicts were resolved quickly and their partnership re-engineered, increasing the chance of their firm’s long-term success.

Keywords: conflict management, entrepreneurial team, start-up team

INTRODUCTION

Within the present national and worldwide conditions of business and education, we have begun to ask ourselves major questions about technology entrepreneurship and its place in our society. While these questions may not be new (Gartner & Vesper, 1994; Kuratko, 2005), the importance and significance of an innovative and entrepreneurial spirit focused on technology in American society is emerging as a critical factor for competing in a global market for technology (Minniti & Bygrave, 2004; Rothaermel, et al., 2007; Schramm, 2006).

From the positive impact of small techno-centric businesses on new job growth, and the apparent competitive advantage in high technology observed within the United States, one would think the status quo is working and there is little to worry about. Recent data suggest that a large percentage of new job growth in the U.S. is created by small firms, as shown by the relationship between firm size and new job creation in the U.S. economy in Figure 1 (U.S. Bu-
If one aggregates businesses by size of small (<100), medium (100-499), and large (>500), the point is obvious: small business is important in the U.S., accounting for the largest percentage of new job creation.

**Figure 1. Employment Change by Size of Firm (thousands, seasonally adjusted)**

In 2011, The Kaufman Foundation reported that, on average nationwide, 320 out of 100,000 adults were involved in the creation of over 543,000 business creations each month during the year (Kauffman Foundation, 2012). According to the Small Business Administration, small firms employ about half of all private sector employees and pay nearly 45% of the total U.S. private payroll. Though an estimated 543,000 new employer firms began operations each month in 2011, just as many firms closed that year. Why is there such a high failure rate of small businesses, defined by the U.S. government as an independent business having fewer than 500 employees? The causes of failure are numerous and include the following: the market may create failure; inadequate funding and capitalization; and competition from established enterprises. But all too often the collapse from disputes among the people trying to make the business profitable may destroy an otherwise promising enterprise (Cronin & Weingart, 2007).

**ENTREPRENEURIAL SUCCESSES AND FAILURES**

A common denominator that differentiates successful entrepreneurs from those who are not is directly related to the concept of harnessing the entrepreneurial mindset (Wellman, 2010). An entrepreneur is someone who perceives an opportunity and creates an organization to pursue that opportunity (Bygrave & Zacharakis, 2009; Karatko & Hodgetts, 1995). A typical question an entrepreneur must ask him or herself is, “Am I willing to embrace new ideas and suggestions and work hard to develop the knowledge and expertise required, or do I have a particularly proud attitude and think I already know everything?” Early in the 20th century, Joseph Schumpeter gave us a modern definition of an entrepreneur focusing on the person who destroys the existing economic order by introducing new products and services, by creating new forms of organization, by bringing together individuals with new types of education and/or experience, or by exploiting new raw materials (Bygrave & Zacharakis, 2009). For example, we now accept that, all too often, technology entrepreneurs are part of a team composed of individuals from a variety of disciplines such as business, information technology, engineering, and science.

**THE LEARNING ORGANIZATION**

The very nature of technology and innovation is based on teamwork and creativity. Technology entrepreneurs bring together aspects of the technical and the business world to produce economic value in the marketplace.
ogy entrepreneurship thereby involves the creation of new business enterprises that generate benefits (wealth, jobs, value, progress) for participating parties by creating unique, new arrangements of resources, including technology, to meet the needs of the marketplace (Dorf & Byers, 2008). Most if not all new ventures face new challenges both from learning and adapting to changing conditions and discovering unknowns. Technology ventures create, acquire and share knowledge, and, in fact, are considered learning organizations when they adapt actions and behaviors as a result of new knowledge (Dorf & Byers, 2008). Accordingly, learning organizations are typically skilled at five key activities:

1. Systematic problem solving;
2. Experimentation with new approaches;
3. Learning from their own experience and past history;
4. Learning from the experiences of others; and
5. Transferring knowledge quickly and efficiently throughout the organization.

New venture teams, especially in a technology start-up, may be united because of the product innovation, but they may easily become disconnected and unrealistic when it comes to the management of the enterprise. Managerial faults exist because of the absence of organization, control, follow-up, course corrections, or perhaps because wrong people are in the wrong place. In the field of entrepreneurship, it is commonly mentioned that past experience plays a significant role in the decision-making process of entrepreneurs (Minniti & Bygrave, 2001; Sarasvathy, 2001). If one considers the importance of past experience in the success of new business ventures, it is easy to understand why financiers typically look for an experienced (and previously successful) management team. The decisions of an entrepreneurial firm are the result of the firm's ability to process knowledge and learning (Sarasvthy, 2001). Entrepreneurs learn by doing, thus entrepreneurship is based on a process of learning that allows the entrepreneurs to learn from successes as well as failures. Conflict is also an essential characteristic of learning organizations. Conflict management scholars indicate the need for accommodating and managing conflict for the potential of collective learning to be realized (Amason, 1996).

**THE NATURE OF CONFLICT**

Due to the rapidity of change, focusing on such issues as technology factors, the business model and strategy, and the expected economic results generate conflict situations. The traditional approach in the Western world has been that conflict should be thoroughly analyzed, documented, and eliminated. Conflict has historically been viewed as being dysfunctional and time-consuming. Individuals were encouraged to suppress and avoid conflict.

In contemporary arenas, however, managers have recognized that, in many instances, conflict can be a sign of a very good market-oriented organization (Hellriegel, et al., 1995). A corollary to this is an organism in the animal and plant world that finds itself in a hostile environment and calls upon its adaptive abilities to cope and survive. Out of necessity, it must develop new adaptive skills, and either change occurs in the organism or it dies. Adaptation, accommodation and flexibility constitute the foundation for future development and change (Darling & Walker, 2001). The entrepreneur who responds to conflict with a reality perspective and problem-solving orientation presents a similar posture. The alternative to successful adaptation becomes stagnation and non-productivity. A basic value of meaningful confrontation with business partners arises from the fact that conflicts can lead to change, change can lead to adaptation, and adaptation can lead to survival and success. Executives who engage in productive disputes typically generate more innovation and productivity than those with low levels of conflict (Eisenhardt, et al., 1997).

Conflict theory has also undergone changes in perspective over the past ten years. Perhaps the most basic change is reflected in the emergence of the term conflict management (Rahim, 2002; Somech, et al., 2009). The difference between conflict resolution and conflict management is an important distinction in any organization. Conflict resolution implies reduction or elimination of conflict. Conflict management does not imply terminating conflict, but involves understanding strategies to minimize dysfunction and enhancing constructive effectiveness as a result of conflict (Rahim, 2002). It has been said that conflict at key organizational levels—what may be termed substantive,
cognitive, or issue-oriented conflict—is essential for effective strategic development (Rahim, 2002). Important by-products of positive, strategic decision-making depend upon the quality of the decision, the ability of consensus, and an affective acceptance of the decision. On the one hand, conflict improves decision quality; but, on the other, it may also weaken the ability of the group to work together (Schweiger, et al., 1986). The presence of conflict in itself is not destructive. How the team manages its conflict, however, determines whether the conflict becomes constructive or destructive to the organization.

THE ENTREPRENEURIAL LEADERSHIP CASE

Jeff and Lauren (both pseudonyms) met at a university career fair the second year of their graduate studies. Jeff was a business major, concentrating on entrepreneurship. He was one of the first to raise his hand when the professor of one of his freshman undergraduate classes asked, “Who wants to open their own firm in the future?” But he was also the first to say that, without the right idea and the right partner, the job market was his best alternative. With resume in hand, and “dressed for success,” he attended the University Career Fair. Lauren was in her last year of an engineering program. She still had the current semester and one more to complete before finishing her degree, but she thought it prudent to see what opportunities were available to a newly graduated engineer. Lauren usually attended the career fairs offered in the College of Engineering, but chose this time to also attend the campus-wide fair just to “check out” all of her options. She loved engineering, but was not sure that working in an engineering firm was what she aspired to do. Her father was in business for himself, as a contractor, and had supported his family and paid for Lauren’s education, so she had always had the influence of entrepreneurship in her background. Her father always reminded her, when she was growing up, that she too could be an entrepreneur. As an engineer, though, she wasn’t sure what she could do in her own business.

One of the vendors at the career fair was a university promoting their $250,000 Business Plan Competition. Jeff was immediately attracted to the booth to learn more. Lauren happened by and reviewed the brochures on display. The two began to talk, and Lauren told Jeff about her senior project. As an electrical engineer major, her senior final project was to design and build the prototype for a product. The project criteria presented by her professors were to focus on safety, reliability, economic, ethical, and social implications. Nothing was mentioned in classes about commercialization, product development, customer demand, and development. On the other hand, Jeff was quite conversant in the business aspect of technology entrepreneurship, as he was taking a course on technology ventures and had been assigned to write a business plan for a venture revolving around a technology. The two were interested in learning more about the Business Plan competition.

The competition was to be held in six months. Jeff suggested that he could write a business plan for the commercialization of Lauren’s product. Lauren would be responsible for completing the project prototype and any other technology factors since this was her school project, and Jeff would be responsible for the business aspect: market research, business model, operational and marketing strategy, and expected economic results. As it turned out, both conducted a patent search as part of the business plan strategy.

With the help of outside advisors and some professors, Jeff and Lauren competed in the business plan competition. They placed second and won $20,000. They had worked so well together and had become so excited about the thought of starting a company that they decided to proceed with the business. $20,000 was not enough seed money, but it was a beginning. Between friends and family, particularly Lauren’s father, the two raised an additional $50,000. Jeff found an angel investor who was willing to invest another $50,000, but this investor required some modifications to the product design. Though Jeff knew that the collected funding was not enough for a full year of expenses, he felt compelled by Lauren’s persistence to move ahead.

Jeff hired a lawyer to set up the legal business structure and found some office space that would give Lauren a small working area for further product research and development. He began searching out the market he expected would be interested in their device and began making cold calls. Lauren was surprised by all of the forward progress and commitments, including Jeff making customer calls. Lauren had designed a miniature camera that, when mounted inside an automobile, would be able to record images of relevant events that occur in and around the vehicle, much like a security device. Jeff knew that Lauren would need to make some modifications, as required by the investor and as discovered in the market analysis. Jeff discussed the options for the modifications with Lauren, suggesting alter-
natives for Lauren to consider, but Lauren was adamant about not making any changes to the design because they had just started their business. She commented: “Besides, with changes, that’s not how I designed it in the first place.”

Lauren tried to suggest ways they could manage the financial aspect of this partnership without making any modifications to the original design of the product, but her lack of thorough understanding of business finance only intensified her frustration with her relationship with Jeff. The partners were unable to communicate on important issues pertinent to their start-up. Lauren thought they needed to determine how their device was going to be manufactured in large quantities and what marketing strategy they would need to develop. Jeff had other thoughts about manufacturing and marketing, but he had not discussed them with Lauren. Their start-up business had suddenly changed their working relationship, and neither felt comfortable with the other; in fact, they had begun arguing in ways they had never done during their business planning process for the competition.

Jeff encouraged Lauren to go with him to visit the business professor who had helped them prepare for the business plan competition. He was known to be what was generally referred to as a serial entrepreneur—someone who had founded a number of firms—and he was also a respected academic whose research interests were related to small business and conflict resolution. Professor Klent (a pseudonym) was pleased to be of assistance and offered an overview of the theory of conflict to frame the issue he believed Jeff and Lauren would soon be able to identify as plaguing their partnership.

**CONFLICT MANAGEMENT**

Research on a theory of conflict identifies three main categories of conflicts: (1) Task-Based Conflict; (2) Relation-Based Conflict; and (3) Process-Based Conflict. Task-based conflict pertains to discussions about the work being done. Task-based conflict is believed to be the most functional type of conflict because it stimulates constructive debate. Task conflicts generally have a high potential for resolution. Professor Klent told the partners that task conflict might bring multiple viewpoints to light and provide a vehicle for creative thinking through stimulating multiple perspectives (Kurtzberg & Mueller, 2005). This variation in perspectives could produce more insights into the creative process, and if the partners would discuss the options, the professor told Jeff and Lauren, he believed the outcome would be motivating and would impact positively on creativity. Since Jeff and Lauren had avoided the time-consuming efforts of articulating all the tasks facing their new start-up, they had to identify what these tasks would be and who would be responsible for each task. This would lead to a decision-making process that would guide them at that moment and through the various stages in their business development.

Relationship-based conflict is another type of conflict that pertains to the interpersonal interaction among individuals and is believed to inhibit cognitive functioning, thus producing suboptimal products. Often the experience and capabilities among founding partners are similar, as in the case of Jeff and Lauren. Their enterprise was lacking in the crucial functions required for long-term success. Though both partners were well educated in their fields, neither of them had the experience and expertise of running a business, as the professor noted. Their relationship was dependent on mutual contributions. The most successful ventures recognize the expertise in the team, as a whole, and what each member individually contributes to the success of the venture.

The third type of conflict, process-based conflict, pertains to how the work-related roles and responsibilities are assigned and accomplished. This can be very disruptive in an organization, but functional at the beginning of a project when deciding goals and allocation of resources. One thing Jeff and Lauren had not done since the business plan competition was to formulate decision making strategies which would have aided in minimizing process-based conflicts. During the preliminary work for the competition, both partners just wanted to enter the competition and win. They knew their respective roles, she as the engineer, he as the business developer. Things were different since the competition, and their business needed procedures. Once Jeff and Lauren would identify all the responsibilities necessary for start-up development and success, they would then be able to assign specific roles to each of the partners.

Professor Klent explained to the partners that historically, each of these types of conflicts was dealt with using different strategies for resolution. For example, multi-functional training (Maltz & Kohli, 2000) focuses on reducing task-based conflict. Increased communication over the issues, however, may be known to affect task-conflict, but may be counterproductive for reducing relationship-conflicts (Jehn, 1997). However in high-technology organizations, espe-
cially start-ups like the one Jeff and Lauren founded, conflicts among the founding team members permeate all conflict types, and consequently a broad perspective is important. Additionally, several studies have documented that the extent to which team members need information, material and support from the other team members in order to complete their jobs alters the consequences of the conflict and provides an incentive for collaboration (Somech, et al., 2009). This supports the findings that conflict management styles have a major effect on team performance and should be considered carefully to maximize the results. Teams differ in their general handling of conflicts and, therefore, should be managed according to the dynamics of the team (Keaveney, 2008). So Jeff and Lauren needed to identify a conflict management process they could use at that moment, as well as in the future.

CONFLICT MANAGEMENT: A SKILL SET MODEL

Professor Klent suggested a few conflict and negotiation models, each of which consisted of a non-linear reiterative series of steps (Rahim, 2002). These models suggested several strategies of conflict management that involve recognizing

- the types of conflicts, especially those with negative effects on individual and group performance;
- the types of conflicts that may have positive effects on performance; and
- the use of different conflict-handling styles.

For long-term management, Jeff and Lauren needed a multi-dimensional process for handling conflict that addressed collaboration, something Jeff and Lauren had identified as a reason for seeking assistance from Professor Klent. They understood that collaboration was an approach that would successfully address each of their concerns (Sorenson, et al., 2008). Collaboration includes elements that help focus not only on personal desires, but on business goals as well.

Collaboration involves exchanging information and working together to understand problems and thereby promoting positive relationships and business success (Sorenson, et al., 2008). The model Professor Klent presented to the partners encompassed four negotiation skill sets: assessment, intervention, resolution and maintenance (see Figure 2). A process for managing long-term relationships, such as those between business partners, whether in a small start-up or a large organization, can be learned and fostered. The professor explained to Jeff and Lauren the conflict management skills as defined by the conflict management model (see Figure 3). Briefly, the preliminary assessment includes knowing yourself and the relational acceptance of the other party in the conflict. The intervention is one's decision to address the issue using meaningful communication. The resolution assessment focuses on the assumption(s) analysis, determining objective(s), and choosing alternative(s). The resolution deals with the action agreement. The maintenance of any conflict management is continually offering feedback review and continual oversight. This model of skills will work as a framework to reinforce the need for conflict management from an early stage of growth and development in any enterprise start-up.

Figure 2. Conflict Management Model
Jeff and Lauren had come to a major roadblock in their entrepreneurship business partnership. They were not communicating clearly with each other; they had not articulated their personal and professional goals; and they were struggling with the roles and responsibilities for themselves and for each other. Competing viewpoints that promote creativity had therefore led to conflicts that had become disruptive to their relationship as a team. Using the Conflict Management Skills Model, Jeff and Lauren could begin to untangle and re-engineer their business partnership. The two of them then set out on a very interesting interactive journey of using the Conflict Management Skills Model encompassing the four negotiation skill sets (Figure 3).

COMPONENTS OF THE CONFLICT MANAGEMENT SKILLS MODEL

Assessment: Know Yourself

Professor Klent began with an assignment for the partners that focused on assessing their own strengths and weaknesses. Psychological models identify personality characteristics of entrepreneurs as possessing a number of similar traits: risk taking, need for achievement, and strong locus of control. However, shortcomings and other weaknesses in managerial skills, decision-making skills, and even experience can derail a new enterprise, not to mention the relationship with partners and a team. Jeff and Lauren had to show a keen sense of self-awareness to improve their prospects for a successful endeavor. The process of managing conflict had to begin with each other.

The innovator, Lauren, around whose idea the venture had been created, owns the intellectual property, but in and of itself it is worth nothing unless the business venture makes money. With the help of skills in business and a strong management team, the product would have the potential of developing into a profitable endeavor. However, the owners, both Lauren and Jeff, must be willing to share control of the business and have confidence that each partner is fulfilling his or her obligations. Even good technology is not enough. Knowing what skills one has and what skills are needed to advance the enterprise is worthy of the same in-depth analysis as the founders spent on the business planning process. Both Jeff and Lauren needed to take an inventory of their skill sets and then compare what each founder brings to the venture. If Lauren is the chief engineer, she must be given the authority to make engineering
decisions. However, having shared values and goals, teams can excel. Using an open process designed to generate multiple alternatives, Jeff and Lauren can select the best solution. To be successful, they needed to excel at creative tasks.

**Assessment: Relational Acceptance**

In effective entrepreneurial partner relationships, each person must recognize his or her own self-interests as well as the interests of the other—a process which can further mutual objectives. They can assist one another to succeed through reciprocal and advantageous communication resulting in collaborative arrangements about responsibilities and accountabilities (Culbert & Ullmen, 2002). Professor Klent reminded Jeff and Lauren that, in technology firms, entrepreneurial teams outperform single entrepreneurs, since new ventures require more capabilities than one individual is likely to have (Dorf & Byers, 2008). The two entrepreneurs were fortunate to have the two sets of skills available for the venture, business and engineering, but they needed to address their professional relationship.

**Intervention: Address the Issues**

A gap inherent in the educational background of Jeff and Lauren came from an academic and philosophical approach to the curriculum in their universities. The goal of engineering education has always been to create good engineers, but when it comes to technology entrepreneurship and management leadership, there has been a relatively little focus in many institutions. By default, many educational programs in engineering appear to drive out the thrill of innovation and management leadership and kill the spirit of technology-based ventures in exchange for purely scientific and analytical procedures that lend themselves to quizzes, exams, and exact solutions to problems.

The goal of business education has been debated in the literature for decades, but the main goals of business education programs are to teach the processes of decision-making; the philosophy, theory, and psychology of management and leadership; practical applications; and business start-up and operational procedures (Association of Advanced Collegiate Schools of Business, 2010). The resulting differences between Jeff and Lauren in their perspectives on innovation and business development did not need to create a barrier in their relationship as long as they believed that, collectively, they had the ability to address the primary issues and perform the necessary tasks. In their case, the primary issue related to this conflict dealt with their roles and responsibilities in creatively managing and leading a start-up enterprise.

**Intervention: Meaningful Communication**

Conflict may arise from a number of issues, yet one of the top problems Professor Klent found between Jeff and Lauren was their lack of meaningful communication. At this point in the conversation, the professor reminded the partners of the framework of all communication processes so that they would understand what they needed to do to improve their own interactive communications. In a perfect communication episode, he said, a sender transmits a message that is accurately received by a recipient. Three possible problems can arise: the sender fails to send a message; the message is sent but is inaccurate; the message received by the recipient is misunderstood. Historically, engineering processes placed individuals in solo performance, and consequently working in isolation, often resulting in poor or substandard communication skills.

The environment today shows collaborative projects requiring a new form of communication and shared understanding. Shared understanding denotes a situation of mutual knowledge, beliefs, and assumptions in relation to the object of the discussion (Clark & Brennan, 1991). Conflict had occurred between Jeff and Lauren based on attitudes, skills, values, and goals that were salient to each individual’s behavior, but which were perceived to be exclusive of the other’s attitude, skills, values, and goals (Rahim, 2002). Collaboration is difficult in cross-disciplinary teams, especially since each profession has its own language and terminology, approach to learning, and mechanisms for information exchange. The challenge is recognizing the differences and overcoming the barriers in a meaningful way.

The three most common communication indicators in the negotiation process, to which the professor wanted the partners to pay particular attention, were the amount of exchange, directness, and mutual concessions (Meiners and Miller, 2004). The amount of information exchanged during communication to resolve conflicts specifically refers to the depth to which Jeff and Lauren would discuss plans, exchange information and discuss potential consequences.
The exchange should be candid and open. Second, directness and depth refer to the extent both parties reveal their preferences in a clear and unambiguous manner. Saying “I just don’t understand” is indirect and can prevent the exploration of alternatives. Lauren was frustrated with Jeff’s plans, moving ahead with the business decisions, and his “demands” to revise the product. Jeff was equally frustrated with Lauren’s lack of responsiveness, and he “just didn’t understand why Lauren is against him on everything he has done for the business.” Where there was little exchange of information, neither one of the founders could adequately define the problems they were having.

The third characteristic of negotiating while managing conflicts is that concessions should be made between the partners. By exchanging concessions, the founders demonstrate flexibility and responsiveness. Jeff must converse with Lauren on the business issues, while Lauren must listen and respond to Jeff’s comments regarding the need for revisions of the product. Jeff and Lauren had begun to understand that their lack of communication, as well as their ineffective communication methods, had had a negative impact on their partnership. If their business was going to move forward, they would need to have an open discussion and consider the long-term ramifications of their inability to communicate openly, fairly as founders of a start-up enterprise.

Resolution: Analysis of Assumptions and Objectives

Jeff and Lauren shared a few incidents with the professor, regarding which he offered them insight and understanding. Take the example of Lauren and Jeff discussing the new design for the camera. Jeff had wanted to help Lauren by making suggestions, but, not having engineering training, the suggestions were not within the principles of engineering design. And Lauren had wanted to suggest a different calculation of cost and benefit, which could not be done. Both reached a gap, which reflected their differences in knowledge. Even when both were working on the same problem, this gap could have become a liability. An engineer sees the problem from engineering principles, and a businessperson sees the issues from perspectives that may have nothing to do with features, structures, and engineering principles. Given such a problem, the professor pointedly told them that people will look for a way to solve it that capitalizes on the knowledge they possess (Cronin & Weingart, 2007). The ability of the team members to bridge their gaps is absolutely imperative.

The process of idea generation can cause a great deal of anxiety among individuals. For one thing, the process may expose one’s gap in knowledge or one’s insecurities and deeply held assumptions, creating a negative emotional tension. Negative emotional feelings can hinder learning and creativity within the innovation process (Conway & Stewart, 2009). An active role of empathy from Lauren’s business-based colleague could minimize what was a frustrating situation for an otherwise confident engineer. Messages exchanged during a conflict management process not only convey information but also can reflect on the relationship (Meiners & Miller, 2004). For this reason, Jeff and Lauren should adopt a personalized approach, as an impersonal tone would reflect distance and defensiveness and could result in an out of control conflict management process and irresolvable situation.

Resolution: Alternatives

Before deciding on an action and composing an action agreement, Professor Klent spoke to Jeff and Lauren about identifying a number of alternatives the team could place on the table to then make an informed decision. The process of innovation at times has been referred to as “a journey” where an idea is navigated through a variety of landscapes, and many routes can lead to many different destinations (Conway & Steward, 2009). Wherever choices exist, conflict can emerge. In this stage of the conflict management process, the goal is to diagnose the problem and determine a course of resolution. In this model, the professor said, there are choices of action among alternatives in the conflict.

An appropriate example the professor used was from Fisher, Ury, and Patton in their landmark negotiation book Getting to Yes (1992). When a problem arises, traditionally individuals ask, “What is wrong? What are the current symptoms?” The next step would typically be to suggest actions and specific steps that might be taken to deal with the problem. Fisher, Ury, and Patton suggest an alternative to this process. Once a problem arises, diagnose the problem and then suggest approaches and possible strategies from a broad range of ideas without making an immediate suggestion for a specific solution. This adds alternatives to what might be done. Just because a team generates a list of alternatives does not mean they have to agree with all the alternatives. Alternatives mean more options for consensus.
What might seem a likely solution to the problem facing Jeff and Lauren would be to assign Jeff to be the business manager and Lauren to be the engineer; i.e., divide the roles and manage the enterprise accordingly. However, that might not be the best use of the partners’ talents, nor would this be the most effective way of managing for conflicts in the future. There are many roles and responsibilities in a start-up.

Jeff and Lauren must determine what their respective positions will be in the enterprise, while also identifying various approaches to effective decision-making. If, for example, an investor spoke about revisions of the product, the engineer should have been consulted before a decision was finalized. Jeff may have eagerly agreed to make revisions, not knowing whether the suggested revisions were capable and within budget. Lauren, on the other hand, must be willing to consider alternatives to her original design if it improves the product, meets budget, and satisfies the market demand more effectively.

Resolution: Action Agreement

At this stage in their venture development, Professor Klent told the partners they needed flexibility in their approaches and trust in each other. An action agreement should be developed by consensus among team members, which is more likely to enhance organizational performance when they not only agree or abide in principle to the decision, but they both understand and commit wholeheartedly. A common understanding would give Jeff and Lauren the ability to continue to act independently but consistently with the actions of the other person and the spirit of consensus. In looking closely at the controversy between business and engineering, the benefits of a high-quality decision would be lost if the team lacks understanding or commitment needed to implement the decision at the forefront. An action agreement and ultimate resolution of this initial conflict sets a tone for future conflicts that will eventually occur. Sincere consideration must be given to the input of each side of the issue at hand. If Jeff and Lauren had chosen to manage their conflicts, they needed to acknowledge their differences of opinion and develop norms about how these disagreements and conflicts would be resolved. They should prescribe how they will deal with conflicts, promote mutual respect, establish communication patterns that enhance effective discourse, and recognize the unique knowledge each partner brings to the venture.

Maintenance: Feedback Review and Continuing Oversight

Finding a solution and mediating conflicts does not mean the problems are solved. Jeff and Lauren had begun a business venture without the appropriate business processes in place. This led to a gap in decision making between the two partners that required time-consuming intervention. Fortunately for them, this process was the catalyst for productive assessment and redirection of their goals for their enterprise. When business partners work well with each other, it is usually a mix of complementary skills and shared ambition that can turn a fledgling venture into an entrepreneurial success (Blank, 2009; Dorf & Byers, 2008). The future successes of their enterprise depend on their unbiased communication, flexibility, and trust in each other. Organizations that continuously provide maintenance and feedback and which have a set of conditions in place to manage their processes are likely to thrive in an ever-changing market.

Jeff and Lauren managed to take the conflict management model offered by Professor Klent and work out a strategy for dealing with conflicts. They reassigned the tasks and responsibilities of the partners, structured the decision-making process as a consensus, and most importantly decided that a lack of clear and definite communication had been one of the breakdowns in their relationship. They chose to establish open communication in face-to-face meetings and to respect each other’s knowledge and skills. They agreed that Jeff would be the President and CEO and Lauren would be the Chief Engineer and Vice-President, and they wrote job descriptions that delineated their respective duties and responsibilities. Establishing these internal policies will prepare the team for future employees as the enterprise grows. Additionally, the partners agreed they would continuously monitor their partnership in order to maintain a healthy professional relationship.

**SUMMARY AND CONCLUSIONS**

This case study offers important implications for the dynamics of conflict management in an entrepreneurial venture start-up. A key premise in the literature on new product innovation is that the rate of new product introduction is a
function of a firm's ability to manage, maintain, and create knowledge (Smith, et al., 2005). Knowledge development and management is inherently stressful for organizations and calls for strategies and practices in decision-making. The success or failure of a venture falls squarely on the strategic decisions of the executive team. Making organizational decisions resulting in positive business results, however, may create interpersonal conflicts. Eisenhardt, Kahwajy, and Bourgeois (1997) studied a dozen technology-based companies and found that teams that were most productive and successful in their strategic decisions were most likely able to mitigate interpersonal conflicts.

Conflict over issues is natural, and may lead to more effective strategic decisions in today's environment. The use of some form of rigorous, open and interactively responsive debate of opposing views or positions would facilitate a superior single decision better than either of the initial positions themselves (Amason, 1996). The way a start-up team manages its conflicts may have a permanent effect on the success of its venture. Healthy conflict can quickly turn unhealthy and lead to an unproductive organization unless conflicts are managed appropriately. The role of conflict in decision-making is complex and multidimensional. There is a range of models to use in managing conflicts, depending on the nature of the conflict. The model proposed in this case study encourages open discussion and debate. Sometimes increasing discussion and debate may lead to interpersonal clashes that may harm relationships in an organization. In new business start-ups, the founders must be able to resolve conflicts without damaging their ongoing relationship.

The key to managing conflicts rests with the abilities of the participants to manage conflict without also creating interpersonal friction. Though the external environment in business may be constantly changing and often out of the firm's control, the internal environment of the organization can be managed, and that process begins with the founders. Utilizing the skills model of conflict management as a tool, as outlined in this case study, can lead to more expedient and successful conflict resolution that may increase the chance of a firm's over-all long-term success.

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Symbolic Interactionism and Moral Hazards in Higher Education

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Public colleges and universities today are more than institutions of academic study. They play a role in the economic and social life of their communities by engaging in partnerships aimed at enhancing their scope and brand image. This paper suggests these partnered activities do more than just manage costs and replace state support during economic downturns; the activities are also central to managing the image and political scope of the institution. This paper presents an exploratory, multi-disciplinary examination of the market forces and potential moral hazards inherent in hybrid public/private partnerships in higher education. Agency and symbolic interaction concepts are used to explain the uses of private/public partnerships to achieve both symbolic and functional ends. The theoretical constructs are applied to three recent cases—a foodservice arrangement at University of Central Arkansas, an online course platform contract at Arkansas State University, and the Pennsylvania State/Sandusky/Paterno situation.

Keywords: higher education, symbolic interactionism, agency theory, moral hazards

INTRODUCTION

Economic downturns and increased demand for college coursework in a knowledge economy place a double bind on colleges and universities. Finney (2010) suggests the three D’s (general disinvestment, demographic growth in enrollment, and increased demand in a high tech society) have all placed strains on higher education finance. Replacing lost state appropriations with increases in tuition and fees is of course unpopular with college going students and their parents as percentage tuition increases far exceed those of general inflation (Wadsworth, 2011; Vedder, 2004). Further, the recent state of the world economy has added to the challenge of generating private donations and maintaining predictable returns (Butler, 2011; Fuller 2012, Masterson, 2011). Consequently, it is to be expected that colleges and universities would be using multiple strategies to replace lost revenues, such as targeting research grants, emphasizing overseas recruiting, increasing online offerings, and entering into public/private partnerships.

This paper argues that while the media and interested parties have often addressed the facts of a changing mix of funding sources for higher education, little exists in the media or in the education literature that systematically addresses the unique issues of economics and accountability posed by emerging structures of higher education finance. This paper represents an exploratory discussion of the potential for multi-disciplinary concepts to explain recent developments in higher education. The analysis begins with an overview of economic and sociological concepts which suggest education markets differ significantly from those for other consumer products. The second section will synthesize the specific moral hazards implied by the interdisciplinary issues. Finally, the paper will demonstrate how some of the concepts developed in the earlier part of the paper can be used to explain problem areas in the foodservice contract at University of Central Arkansas, the Academic Partnerships online course platform contracts at Arkansas State University, and even the Penn state scandal on the national level. The paper concludes with some tentative observations about the relative power of key players in the higher education arena and the need for additional research and theory building.
PERSPECTIVES ON MARKETS FOR HIGHER EDUCATION

Market Economics

Accountability in higher education is problematic in a market based institutional arrangement because of the nature of the service or product. In a purely competitive market, consumers identify specific needs and rationally seek out a source that provides the best combination of quality and cost. Since the purpose of higher education is to acquire knowledge about the unfamiliar, the very nature of the service sought assures that consumers cannot really have adequate information to make a reasonable assessment of quality. If they already knew the nuances of the subject matter, they would not need to take courses. Given that is the case, consumers make purchase decisions based on price, convenience, and potentially misleading indicators of quality such as published ratings based on survey data from the institutions themselves, popularity of sports programs, prestige of selected professors, websites, and advertising copy created by the institution (Ruch, 2001).

Economists traditionally talk about four “ideal” types or forms of markets: 1) pure competition, 2) monopoly, 3) oligopoly, and 4) monopolistic competition. In “pure competition” there are typically many producers providing a homogenous product. Under pure competition, consumers view the goods or services provided as interchangeable and merely look for the best price. This forces producers to be very efficient, constantly looking for a way to produce the product at the lowest cost in the market so that they can have the lowest price to attract customers but still be able to make a modest profit. Purely competitive markets provide an automatic regulatory mechanism in which consumers get the greatest amount of goods at the lowest price (Garb, 1968).

In monopoly markets, geographic or legal restrictions assure that the good or service is only available from one provider. Monopoly markets provide less incentive for the producers to focus on cost efficiency because consumers only have one source; the only real restraint on price is that if the service becomes completely unaffordable, consumers may forgo the product altogether. Oligopoly markets have only a small number of providers for a specific product or service. Oligopoly providers may have an unstated “gentleman’s agreement” not to compete on price, assuring that all providers can earn profits above those of a purely competitive market. Still, oligopolies are subject to cutthroat competition and price wars if one participant breaks the tacit agreement on price in order to attract the lion’s share of the market followed by other players dropping their prices to retain market share.

Some products fall into markets between pure competition and monopoly, a condition termed monopolistic competition (Chamberlin, 1962; Garb, 1968). In these markets it is either inherently impossible to standardize the product sufficiently to make services interchangeable, the consumers are geographically constrained to make purchases from a limited number of producers, or the producers actively seek to add features and qualities that make their product sufficiently unique to create a market in which consumers shop for the best features rather than the lowest price. Producers may attempt to create an impression of differences in quality through branding and advertising whether actual differences exist or not. Successful advertising campaigns attract customers, create brand loyalty, and provide incentive for consumers to pay extra for the good or service. When successful, branding initiatives allow producers to bootstrap themselves from a purely competitive to a monopolistically competitive market.

Prior to the widespread availability of distance learning technologies, many public institutions of higher education were operating like oligopolies. Students who wanted to stay close to home and take advantage of in-state tuition rates had limited choices. Institutions did not differ widely on price within a given state, though occasional price wars might erupt in the form of competition for institutional scholarships. With distance learning technology, the game has changed. If students perceive educational offerings as interchangeable, the market comes closer to a purely competitive market. But it is in the producers’ best interests to avoid this model because it would reduce both institutional prestige and financial rewards. Since inherent qualities of the educational product are not knowable by consumers a priori, and deficiencies in the education program will come to light only after a long delay, educational institutions do not generally compete on qualities of the educational product itself. Collegiate websites tend to use sports images and pictures of students engaging in extramural activities to create a brand image of a fun place to be. Advertising is used by today’s providers of educational services to actively manage their markets to increase the chances that consumers will perceive differences in quality between their education brand and those of others, whether they exist or not. Moore (2009) notes that these techniques are used by institutions to convert the market structure from the pure
competition model to the monopolistically competitive structure.

**Problems in Educational Accountability**

Because of the unique market in which consumers are unable to assess institutional quality *a priori*, the systems for offering college degrees may be at risk of devolution to a system of credentialization in which degrees lose their connection to an underlying knowledge base. While dedicated university educators may want to make sure college is a challenging endeavor, students and parents might actually prefer to receive the credential at minimal cost and effort if the degree would still serve as a passport to higher paying wage markets.

The public’s inability to assess educational quality directly coupled with institutional efforts to create a brand mystique that will take them out of pure competition into a monopolistically competitive market model has resulted in side effects of the corporate branding model which are taking American colleges further and further away from their educational essence (Wood & Oates, 2009). The increasing emphasis on publication is itself a phenomenon of a symbolic branding culture. Publication prestige is easier to count and appropriate to the university image than performance in the classroom.

It is popular today to assume that better accountability would solve educational problems. In reality, systems of so-called accountability can also exacerbate the problem; by allowing student ratings to be a major component of teaching performance, the system itself may contribute to a watering down of the curriculum. Understanding the basic concepts and terminology of agency and symbolic interaction theory could be a place to start in understanding and describing the larger forces at work that could potentially work to erode the status of higher education from one of rigorous training (either intellectual or professional) to one of symbolic rather than substantive credentialization.

**Agency Theory and Accountability**

Agency theory conceptualizes organizations or even society as a nexus of contracts between self-interested principals and agents who have some divergence in their individual goals. Agency theory is used in the field of accounting to describe problems in achieving coordination between the goals of the principal and the agent (Watts & Zimmerman, 1978). A key problem addressed by agency theory is the *moral hazard problem* that arises from information asymmetry (Mattessich, 1993). The key characteristic of educational markets is that students and citizens do not know enough about specialized educational offerings to judge their merits *a priori*. Further, course descriptions on transcripts give future employers little clue as to the actual rigor or content of a given course. Another problem in principal/agent relationships is the *horizon problem*. Players who have a short planning horizon will act differently than those who are looking at the long run effect of their behavior. Chambers (1967) describes the principal-agent connection as “a temporary coalition of participants in an unstable equilibrium” (p. 16). Agency theory suggests that changing informal contracts or institutional arrangements can prevent grosser forms of dysfunctional behavior, but there is a cost-benefit restraint on controlling all moral hazards inherent in the nexus of contracts between a myriad of players in society. The term moral hazard as used in this paper refers to systemic problems which promote short term satisfaction of individual wants and needs to the detriment of the long term well-being of the overall system participants.

**Symbolic Interactionism and Educational Accountability**

The foundations of symbolic interaction theory were developed by George Herbert Mead (1922, 1934), a University of Chicago professor who melded ideas from philosophy, sociology, and psychology into a pragmatic theory that explained how actors are affected by and in turn impact their social environment. Primarily a lecturer rather than a writer, most of Mead’s theories were expounded by his students, particularly Blumer. Blumer (1969) saw the basic premise of symbolic interaction as the idea that events are not purely objective, but are impacted by the meanings the actors ascribe to external stimuli. Blumer saw three ideas as critical to symbolic interactionism: 1) the focus on the interaction between the actor and the world, 2) a view of both the actor and the world as dynamic processes rather than static structures, and 3) the actor’s ability to interpret the social world (p. 2). Burbank and Martins (2009) suggest that the theory of symbolic interactionism is typically used to focus on individual meaning in society, but is also related to the macro perspectives used by Habermas’s (1973, 1984) critical perspectives theory. These theories suggest that it is not at all surprising that symbolic measures are used as a substitute for the full details of a situation in
our interpersonal dealings. These theories would suggest that branding concepts for businesses, not for profits, and colleges/universities are quite normal. They also suggest that intentionally misleading messages and personal misinterpretations could lead to crisis points which seriously disrupt the functionality of the system. Lynch and McConatha (2006) posit that information age technology has heightened the visual component in contemporary society to the point of hyper-symbolic interaction. Lynch and McConatha (2006) suggest that a useful research direction might be to measure the degree to which digital societies are becoming less and less able to tell the difference in objective and subjective realities. Cetina (2009) maintains that advanced technologies used in global communications lead to greater use of scopic components, i.e., the use of artificial measures of situational dynamics.

**A SYNTHESIS OF MORAL HAZARDS**

The market for higher education depends on a complex array of social actors. Key actors include college recruiters, students, citizens, educators, government agencies at the state and national level, accrediting bodies, and administrators in the various types of colleges. The problems for each key actor are discussed below with the primary issues summarized in Table 1.

**College Recruiters**

College brochures use government literature to quote the higher earnings of college graduates and paint an appealing picture of campus extracurricular activities (Bureau of Labor Statistics, 2010; Longley, 2010). Students are assured that most of their college education will be paid for with “financial aid,” which generally turns out to be loans. Many colleges direct their recruiting agents not to discuss academic rigor or to try to promote specific academic programs. Orientation programs usually emphasize extracurricular activities more than academics. In most cases, little is said about the potential for financial ruin if the student does not study or simply does not have the academic skills needed to be successful in college. Students are rarely told that actually finding the time to study in a disciplined way will be difficult to balance against the usual distractions of modern life coupled with working full or part time jobs to fulfill their “unmet financial needs” and to pay for housing, transportation, clothing, and the electronic gadgets that have become a necessity in modern college life. Emphasis on giving a positive spin rather than a more balanced picture, which includes the mundane difficulties of college life, is encouraged when recruiters have numeric targets with compensation and continued employment tied to meeting the numbers (Field, 2010).

**Students**

Students with weak high school backgrounds, inadequate time management skills to juggle school and employment, and little tolerance for delayed gratification find college to be very difficult under the more rigorous instructors. On-line tools like Rate My Professor.Com (http://www.ratemyprofessors.com/), Rate A Prof (http://rateaprof.com/), or ProfessorPerformance.com (http://www.professorperformance.com/) can help students scope out the easier professors. If students begin college merely because of the vague promises of “college is the way to a better life,” but without any real desire for a specific vocation, they may shop around for the easiest possible major—to a point. Typically even the easy majors eventually have a few upper level courses with sufficient rigor that students will not be able to fake their way through them. By that time, the student already has amassed a large volume of student loans with no degree to show for the related debt. Consequently significant numbers of students drop without having acquired the skill set that will allow the “better life” or allow them to pay off their college loans.

**Citizens**

The general citizenry of a geographic location are stakeholders in the educational system. Citizens benefit from the economic multiplier effect (Wright, 1956) when college tuition, financial aid, and purchases from businesses by students invigorate their local economy. Citizens benefit even more if some of the students become highly skilled and stay in the local area to enhance the types of businesses that will thrive in the local economy over the long run. However, the skills sets acquired are much more difficult to assess and provide enhancement only in the long run. The local economy is immediately stimulated by tuition and financial dollars along with other purchases in the community. Consequently, citizens tend to lobby their legislators to support community colleges in their area and tend to pay attention primarily to enrollment statistics rather than indicators of learning from their community college students.
Table 1
*Moral Hazards of Key Players in Higher Education*

<table>
<thead>
<tr>
<th>Player</th>
<th>Trigger</th>
<th>Moral Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>College recruiters</td>
<td>Short run numbers and tuition/financial aid dollars.</td>
<td>Students are ill-informed about the rigors of the program, incoming skills needed, and financial risks.</td>
</tr>
<tr>
<td>Students</td>
<td>A vague concept of a better life without an understanding of the underlying discipline needed for success.</td>
<td>Student is not motivated or does not have enough hours in the day to study and really acquire the skills that will provide the better income hoped for when they enrolled.</td>
</tr>
<tr>
<td>Citizens</td>
<td>Economic effect from increased dollars flowing into the community.</td>
<td>Citizens pay little attention to educational quality because it is difficult to assess and has a longer horizon than the short term economic gains.</td>
</tr>
<tr>
<td>Educators</td>
<td>Educators are rated by students who do not want rigor and evaluated by administrators who want the prestige of quality research. They fear not being understood if they took their educational crisis concerns to the public.</td>
<td>Educators operating on their own have little power to enhance the rigor of the college classroom and often succumb to the process of managing the measurable markers of student ratings, research output, and service hours.</td>
</tr>
<tr>
<td>State and national governments</td>
<td>Elected officials normally have a limited term and must focus on short term markers of success such as numbers of enrollees and graduates.</td>
<td>Because learning quality is a long term concept and difficult to measure across disciplines, state and government officials reward programs based on enrollment and physical rather than mental retention.</td>
</tr>
<tr>
<td>Accrediting agencies</td>
<td>Accrediting agencies exist through member fees. They get ahead by accrediting more institutions, not by removing the accreditation of one of their members.</td>
<td>Institutions have such a variety of programs it is difficult to have a single objective measure of quality. Money is made by making the accrediting ‘process’ very elaborate and selling training programs for the accrediting visits which primarily check to make sure the institutions have quality ‘processes’ in place which are a weak surrogate for actual quality of learning.</td>
</tr>
<tr>
<td>College administrators</td>
<td>College administrators are hired by Boards appointed through a political process, consequently administrative incentives will be more closely aligned with the short term goals of political forces above them than those of the academic faculty.</td>
<td>College administrators are key players in the public relations, branding, and image making agenda. Administrative emphasis is on recruitment and retention along with managing symbolic markers of quality such as college ratings, financial development, research output, and grants.</td>
</tr>
</tbody>
</table>
Educators

In today’s society, educators have multiple outputs that are expected. They must get good student ratings, they must publish, and they must create positive goodwill for the university within the community and professional realm in the form of service activities. College students today spend considerably more time working, watching TV, and electronic socializing than they did in the prior generation (Babcock & Marks, 2010). Yet students still get to rate the professors. Further, institutional branding efforts are better enhanced by “innovative techniques” rather than fundamental rigor in education. Base level competencies are de-emphasized in favor of “student engagement” (NSSE, 2011). Ideally students would all put in some level of disciplined study of the basics in their field and become engaged in stimulating service or hands-on activities, as well. Realistically, there are not enough hours in the day. Even the professors who want to be rigorous find they cannot require as much homework, memorization, and detailed analytic projects as they once did and still get good ratings from the students. Some faculty are willing to try automated student response systems, i.e., clickers and Second Life ® avatars and other on-line game techniques to engage their students. Objective evidence of the long term efficacy of these techniques is hard to come by (Walker & Barwell, 2009; Warren, Littleton, & Macleod, 2009). It is an open question as to whether these devices really work better than traditional modes or if they are just a mechanism used to stimulate the economy through the purchase of high tech devices demanded by faculty and administrators seeking to keep students better entertained, i.e., engaged. Generally, faculty who use the techniques think they work, and those who do not use them are skeptical.

Given that research activities are more highly rewarded than teaching, faculty members look for ways to get release time from teaching to focus on writing and grantsmanship. Further, there is no incentive for educators to warn the public of the crisis in learning that exists in American higher education today. If they talk openly about their concerns, some members of the public will assume it is just their individual college and send their kids somewhere else. This could lead to teachers being laid off—not a good prospect for professors who have spent years of their life specializing in just one type of expertise with limited academic openings.

State and National Government Leaders

Elected officials typically have a limited term of office before they must be re-evaluated by voters. Consequently elected officials have a very short term time horizon. Habermas (1973) observes that government leaders will not stay in power without a robust economy or at least the appearance of one. Establishing vocational schools, community colleges, and higher level universities in the local area are ways to attract state and federal dollars to the community. Sporting and cultural events associated with educational institutions attract visitors and increase the dollars flowing to local businesses. Politicians and other public administrators have a stake in managing the number of students attending and matriculating from college in their geographic region. Quotes of the college going rate and numbers of degree holders in the area are used in advertisements to attract business and industry. Numbers of students and the retention rates at public institutions are widely used by governmental agencies as part of their funding formulas for public institutions. Knowing that the public cannot directly assess quality, administrators and political figures have an incentive to manage the symbols rather than the essence of educational achievement because this is what the public will use as a surrogate for direct assessment of quality. Administrators of public and private colleges typically have a keen interest in managing rankings of their institutions by U.S. News & World Report and other media in spite of criticism of these measures (Myers & Robe, 2009).

Political structures in state government see institutions of higher education more as mechanisms to enhance economic development than institutions upholding truth and critical thinking. Political actors may view the academic missions of colleges and universities as secondary to their role in attracting dollars from student tuition, from local commerce related to university events, and from federal grants giving selected professors release time to develop technology that can be harnessed to increase economic development in the local area. Governors compete with other states to attract industry, often by citing the numbers of residents with college degrees. In spite of recent tight budgets and cuts in U.S. educational funding, governors, legislatures, and departments of higher education actively track and look for ways to promote increases in college enrollments and completion. Initiatives in many states provide incentives for college student retention. Most of these efforts ignore the fact that there are two different types of retention. With the difficulty in objectively measuring how long students “retain” learning in specialized college level
offerings, retention of human bodies in the degree pipeline is more likely to be rewarded than retention of facts or techniques by the student body.

Accrediting Agencies

The moral hazard for accrediting bodies is that, in addition to assuring quality, they want to increase their own prestige and power base through the fees paid by accredited and aspiring candidates for accreditation. The fees paid to attend training programs which teach accreditation candidates to manage the scopic measures used to grant and maintain accredited status can be substantial. Though elaborate procedures are in place, this mechanism also suffers from the potential for the moral hazard that economists call regulatory capture (Stigler, 1971). Because those outside the area of expertise of the degree program cannot objectively assess quality, assessment falls to insiders such as deans, provosts, and vice presidents of academic affairs as the main assessors. Accrediting bodies have elaborate procedures and processes for attaining accreditation; this may increase quality. It certainly generates fees from training aspirants in the processes. Accrediting bodies often turn down institutions on their initial try for accreditation, knowing the institution will pay more fees to try again. Once accredited, some institutions are placed on probation, but few have their credentials removed if their dues are paid and they give appropriate attention to maintaining elaborate assessment procedures. Yet the current version of assessment of learning does very little to penalize any institution that simply measures outcomes by whatever elaborate mechanism is allowed by the current accreditation model and promises to make changes that might have a positive impact on future educational outcomes. Assessment goals and outcomes may be lofty but are generally quite vague, providing only indirect measures of graduates’ ability to function on the job or in society. A study by Stone (2012) found that higher ranking, tenured faculty are more skeptical of the overall value of assessment activities than lower ranking, non-tenured colleagues. Frendrich (2007) describes many assessment activities as “grotesque, unintentional parodies of both social science and ‘accountability’” (B6).

While governments suspect that some accrediting bodies are very loose in their standards and sometimes threaten to remove their charters, actually dis-enfranchising existing accrediting bodies is problematic. If government agencies took over the accrediting process, any negative publicity from the bad apples in higher education would reflect directly on the government itself. Further, there is no single standard among academic, society at large, or governmental agencies as to whether the primary aim of a higher education is to foster critical thinking skills, to promote humane and artistic sensibilities, or to enhance vocational skills. Thus, each institution has the latitude to choose its own standards. Furthermore, Masterson (2010) finds that many university board members do not fully understand student assessment processes at their own institutions.

While mechanisms such as government minimum standards for the institution to receive federal financial aid and regulatory approval procedures could impose a minimum standard of quality on college degrees, even these processes are subject to certain moral hazards and attempts at colonization of collegiate institutions for self-interested aims. Independent sector accrediting bodies are used to legitimate the educational offerings in the geographic area. Beneviste (2002) argues that regulations and educational testing are often used for symbolic legitimation purposes rather than purely rational-functional reform. Governments have an incentive to accept weak accrediting measures from the institutions overseen by Departments of Education at the state and local level because they are not really interested in having weaknesses of their educational institutions highlighted.

College Administrators

College administrators are hired through a political process that takes input from faculty, staff, students, and the public, but top level college administrators ultimately answer to the Board. In public institutions these Boards are usually appointed by the governor. In private institutions, Board members are often business figures with potential for generous donations. College administrators play a pivotal role in balancing the demands of the public, student, staff, faculty, accrediting agencies, regulatory bodies, and governmental forces. A college administrator’s primary job is to manage the public persona of their institution in a manner that is acceptable to the political and regulatory forces above them. While college administrators may be concerned about academic quality, managing the public image comes first. If governors want increased enrollment even without corresponding increases in funding, if the public wants convenient classes of little rigor, and if the public is impressed with increases in enrollment and increases in media rankings, these are key factors that must be managed by administrators to continue in their position.
Dollars to maintain the public image are in short supply. The need to increase resources from corporate donors and government grants as the organization grows puts in place an additional demand that may potentially move attention of the administrators even further away from core teaching concerns of faculty in the classroom. Further, faculty are trained to be analytical and to take critical perspectives on their field of study. It is not surprising that faculty extend these critical perspectives to administrators’ academic decisions. While faculty members have the right to exercise their free speech, exercising these rights in the media can be seen by administrators as a threat to the public persona of the institution. Thus, many administrators purposely distance themselves from faculty. In some cases, the primary administrative game becomes finding a way around faculty shared governance mechanisms because faculty perspectives run counter to the political ends of government officials and donors which are paramount for administrators to finesse. Continuing increases in the numbers of part time and contract faculty at American institutions of higher education (Miller, 2001; Monks, 2009) may be as much related to administrators’ desires to distance themselves from vocal, tenured faculty as it is a question of budgets.

THREE CASE STUDIES

The three case studies below provide real world examples of moral hazard issues suggested by the symbolic interaction and moral hazard literatures. The first two cases concern privatization of auxiliary and educational services within University of Central Arkansas (UCA) and Arkansas State University-Jonesboro (ASU). With both campuses having approximately 10,000 full time equivalent students, mature Master’s programs, and a limited number of Doctoral programs, the UCA and ASU programs illustrate problems presumably faced by many non-land grant institutions seeking to achieve a good reputation for quality outputs with limited resources. The third case discusses branding problems caused by a widely publicized athletic personnel problem at Pennsylvania State University. This case study is used to demonstrate some of the moral hazard problems inherent in using non-academic mechanisms for enhancing prestige.

University of Central Arkansas

The University of Central Arkansas has incurred multiple incidences of negative media coverage concerning its upper level administration from 2008-2011. One president with a gambling problem resigned after it came to light he had possibly forged certain documents that enticed the Board of Trustees to grant an early bonus (Deloney, 2011). The subsequent president resigned after it came to light that the exclusive contract for food services to be provided to the university required the corporation to provide $700,000 in remodeling services to the president’s home if the contract were awarded. When the food contract contingency came to light, the new president resigned, but with a contract buyout of $525,000 (Brantley, 2011). The food service contract suggests the importance of looking at potential moral hazards inherent in partnerships with business entities.

Food services, dormitories, and even athletics are often structured in public colleges as auxiliary or business type enterprises. Auxiliary enterprises are business-like functions with less restrictive budget mechanisms than for the regular Education and General (E&G) budget, which has many legal spending and contracting constraints. The assumption is that the activities should be self-sustaining and would not exist if they were not profitable. Since these operations are selling goods and services, the “invisible hand” of the profit mechanism should provide an automatic control mechanism; yet, consumers of the goods and services actually have little choice about purchasing the offered product under contracts that provide exclusive rights to sell on the campus. Further, many auxiliary units, such as athletic programs at many universities, are not profitable at all, being subsidized by other auxiliary units or even the regular E&G funds.

Whether privatization harms or benefits students and society on average is not altogether clear. Privatization of auxiliary services can be undertaken with corporate vendors who are large enough to provide efficiencies of scale that reduce costs to students. On the other hand, auxiliary programs can also be used to charge fees higher than those in a competitive market because of their monopoly status on campuses with administrators having wide latitude for choices to use those excess profits to subsidize the educational mission, to enhance other auxiliary budgets, or to promote plush administrative lifestyles. The use of private vendors can be used as a mechanism to circumvent bidding constraints on purely public funds while effectively laundering public appropriations into the hands of private
interests. In recent years it has become widespread practice for universities to privatize the privilege of monopoly sales to students by shopping the contracts, with or without a formal bid process, to companies willing to make substantial investments in infrastructure improvements at the onset of the contract.

Privatizing university operations is sometimes a choice and sometimes a mandate. Arizona (Arizona Auditor General, 1998), New Jersey (New Jersey Privatization Task Force 2010), and Virginia (Bryson 1997) are examples of states mandating that public colleges consider the potential cost savings to come from privatization. When viewed through the lens of symbolic interaction, privatizing food services serves not only as a potential financial windfall, but also can be used as a mechanism for a public entity to distance itself from what has historically been a problem area. Students love to complain about food services. By privatizing food services universities can not only benefit financially, but will be able to divorce themselves from the complaints by directing blame to a separate entity for correction or by disassociating itself from the private vendor at the end of the contract. There are also advantages in using private vendors for certain services to minimize university exposure from liability issues (Hayes, 2011).

Privatizing of food services at University of Central Arkansas is not necessarily a problem per se. In one view the public relations fiasco arose only from the attempt to disguise the full details of the contract from the public on the front end. It is well known that universities have the potential to generate substantial benefits from private contracts with little oversight, but press reports suggest that contracting administrators may have gone beyond using profits at their discretion after the fact. UCA personnel were allege to have designated the food service vendor’s contingent, pre-award donations for private inurement of administrators in the contracting process rather than students or other units of the institution (Hale-Shelton, October 24, 2011 & December 4, 2011). What is interesting in this case as it unfolded was the absence of any great public outcry about using what could be considered public funds for private inurement or the buyout of the president’s contract. The primary focus in the media seemed to be that the lack of transparency hurt the university brand or reputation, which Brantley (September 2, 2011) termed a “PR disaster.” Universities have to purchase some services from outside vendors as they cannot be expected to manufacture their own pencils and hard drives as a matter of course. On the other hand, when an entity’s external purchasing process encourages significant discretionary funding through excess charges to direct users of the service, this would seem to pose a stewardship/ accountability problem in its own right regardless of the transparency of disclosures. Thus the case illustrates the divergent interests of the student purchases of the privatized services and those in charge of awarding the contracts.

Online Partnerships/Arkansas State University

The online partnership program at Arkansas State University-Jonesboro (ASU) demonstrates that a university’s primary as well as its auxiliary services can be privatized. The rocky beginnings for the online partnership between Arkansas State University and Higher Education Holdings (HEH), later renamed Academic Partnerships (AP), have been well-documented by a special Shared Governance Subcommittee investigative committee (ASU Faculty Senate Minutes, February 4, 2011) and reports in the state and local press. The investigative committee report seems to confirm the divergent interests of administrators, faculty, and other stakeholders suggested by agency theory. Per the Shared Governance investigative report to the ASU Faculty Senate, negotiations with HEH began with visits to corporate headquarters in Dallas and to another university using their online platform in late March of 2008. A contract was signed by mid-April with program approvals through the Arkansas Department of Higher Education by summer 2008.

Pros and cons of the HEH/AP approach to online education continued to be discussed at ASU Faculty Senate meetings throughout the fall of 2008 with some Senators expressing concern about whether new delivery platforms should be considered simply a new medium for offering an existing curriculum or if they should be required to go through the more lengthy process used for new programs approval (ASU Faculty Senate Minutes, November 21, 2008). Some faculty were discomforted by the prospect of future online class sizes up to 1,500 students through the use of coaches without direct contact between the instructor of record and the individual students. In contrast, the campus Chancellor listed enrollment of 300 students in the pilot Master’s in Educational Theory and Practice program, with a net new cost of less than $5,000, as one of the four most significant successes within Academic Affairs for the first quarter of 2009 (Potts, 2009). This was possible due to the unique funding arrangement. As a fee for providing marketing ser-
The decision to terminate Paterno prior to the bowl game is indicative of the strong need to distance the university on non-academic branding activities. Though the institution received fewer dollars per course than for traditional courses, the ability to run classes of large section sizes provided the potential for a larger total revenue inflow, especially if state tuition matching funds are considered. Traditional faculty, on the other hand, had concerns that the online program might cannibalize face-to-face classes. Further, it is unclear whether the $5,000 of new costs is really an appropriate metric of sustainable costs as on-campus infrastructure and existing faculty salaries are inherently program costs as well.

After press reports that the Arkansas State interim campus Chancellor was sitting on the Board of the American College of Education (ACE), a subsidiary of the HEH/AP partnership institution, the interim Chancellor denied taking any remuneration or sustaining any conflict of interest, but nevertheless chose to resign from the ACE Board (Campbell, 2010). The former system president of the Arkansas State University System retired from his position effective June 30, 2010, and was given a full semester leave to retool for a teaching assignment. In October of 2010, the press brought to light that the former system President was also listed on an online recruiting site as the president of American University System (AUS), another subsidiary to HEH/AP (Brantley, 2010; Carpenter, 2010; Smith, 2010). It is unknown what the salary arrangements were for that position because the private subsidiary is beyond the freedom of information laws which cover the traditional public college campus. In November of 2010, the former system president elected to go on uncompensated leave from the university effective January 1, 2011 (News Release, November 18, 2010).

The Arkansas State University HEH/AP case highlights the divergence of interests between layers of principals and agents. University administrators seek to satisfy the demand by their state agencies for a rapid response to perceived demand for on-line educational access. Employment at will in administrative positions promotes emphasis on short term measures which may be exacerbated as administrators near retirement. Traditional faculty tend to emphasize quality of the product, the school's long term reputation, and a slow deliberate process to ensure that quality. It could also be true that there might be a desire for job preservation by traditional faculty that would be difficult for outsiders to separate from faculty quality concerns. Students and parents would be likely to emphasize short term access and convenience over long term quality issues that would be difficult to assess. There is no direct evidence that signing of the initial partnership agreement with HEH/AP was connected to the post-presidency AUS agreement. It is also unclear that there was any direct harm from the Chancellor's position on the ACE Board. Still, the mere perception that these arrangements might color administrative judgments caused enough potential damage to the institution's reputation that adjustments were made, thus demonstrating the power of hyper-scopic interpretation of media signals. The proliferation of subsidiaries and name changes for the HEH/AP organization also suggests additional problems in tracking the reputations of modern educational entities.

**Accusations of Sexual Abuse/Penn State**

Athletics programs are a potential mechanism for brand differentiation by universities. Brand differentiation helps transform the market into one of monopolistic competition where consumers pay premium prices. Sports are controversial in the eyes of some academicians who see them as potentially taking resources away from the educational mission, but the business community values the potential for advertising joint ventures and increased local trade. The public at large is likely to see sports as less controversial than issues in the social or natural sciences. Further, articles about sports endeavors are much more likely to be read in the popular media than academic pieces. Thus, athletics coverage provides a form of media advertising and brand enhancement (Weisbrod, Ballou, & Asch, 2008, p. 180). Although early court results (Drape, 2012) suggest the veracity of allegations against Sandusky, Paterno, and Pennsylvania State University, damage was done to the school via media coverage even before any adjudication in court, which highlights the downside of staking a major portion of a university's reputation and fundraising activities on non-academic branding activities.

The decision to terminate Paterno prior to the bowl game is indicative of the strong need to distance the university...
from even the allegation of mishandling of issues that were decades old. While the allegations in this case appear to be egregious and substantive, it is of some interest that contract language used in the coaching contracts at Penn State and similar institutions commonly allow arbitrary dismissal of athletics personnel even without guilt if is felt that media or other coverage significantly harms the brand image of the institution (Marshall, 2012). Even though it may be difficult for the public to assign much sympathy to the alleged perpetrators or abettors in the Sandusky/Paterno/Penn State situation, it should be a matter of some concern for societal justice if the precedent of placing brand image or *scopic* issues above any semblance of an orderly adjudication of employee rights should come to be the norm for most employee positions.

**SUMMARY AND IMPLICATIONS**

This paper presented an exploratory discussion of the potential for a multi-disciplinary approach to understanding the motivations and power relationships within higher education. The agency literature suggested that institutions exist within a nexus of relationships between myriad social actors. Because of the difficulty in assessing the qualities of education objectively on an a priori basis, it appears that moral hazards which emphasize short term over long term benefits to society may be prevalent in the higher education market. These moral hazards were highlighted by the three cases.

In a complex society requiring increasing levels of higher education, citizens have little time for detailed analysis of the inner workings of higher education finance. Yet, they are increasingly affected by the outcomes. Thus, the public relies more and more on more on *scopic* measures of success of their universities, including flawed *US News and World Report* rankings, athletic win/loss ratios, and public relations images, rather than seeking out the underlying institutional benefits to society. The public relations problem for professional academics is that, given the already problematic nature of the services they provide, as they have become more specialized and more productive in writing articles in the academic press which enhance their own and their institutions’ reputations, the rank and file members of academia and even their professional administrators are increasingly vulnerable to attacks on personal and institutional integrity in the media and from the public at large.

From the analysis of moral hazards it is obvious that administrators, recruiters, and the local economy have shared goals in attaining short term economic advantages. It is not clear that academics have found a way to communicate to other actors in the system that rigorous classroom and intellectual activities might enhance the shared public good more than short term credentialization. The closed nature of academics, teaching, and learning is perhaps exacerbated by FERPA (Family Educational Rights and Privacy Act) laws which make much of what academics do inscrutable to the public. The general populace likely does not remember that the origins of tenure were not in job security per se, but in protecting the right of academics to speak the truth for the public’s benefit. The AAUP (American Association of University Professors), which came to prominence in the aftermath of the McCarthy era as a representative for faculty rights, attracts relatively fewer academicians as members than it once did. Though the AAUP is one of the more prominent cross-disciplinary organization in academia, is not clear that the AAUP’s primary rallying concept of “academic freedom” is well received in the media arena or that its goals resonate with academics as a whole. The public may view this term as a protection that allows faculty to behave badly rather than an empowerment to tell the truth on the greater society’s behalf. It is unclear whether AAUP’s public terminology is a problem of that organization’s management or a symptom of a larger problem that academics themselves have become oriented toward short-term, discipline-specific goals rather than the broader goals of academia as a whole. The introspective tendency of academics may contribute to isolationism rather than reaching out to explore shared goals with other actors in the system.

The moral hazards section of the paper suggests there are good reasons for greater attention to multi-disciplinary issues that impact the long term viability and functionality of systems of higher education. Not only is there potential for more empirical investigation of the linkages and power relations between actors in the higher education setting, but perhaps more importantly, a better understanding of these relationships could provide clues to forestalling some of the tendency for individual short term goals to override perceived long term benefits of higher education in society at large.
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Exploring the Effects of Managerial Ownership on the Decision to Go Private: A Behavioral Agency Model Approach

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This paper utilizes the behavioral agency model to investigate why many formerly public companies have been converted to privately held corporations. Using a matched pairs sample and categorical binary regression, and controlling for effects found in previous studies, we explore how the equity ownership of those entrusted to manage firms, the firms’ executives, might affect their perceptions of the risks of going private and might therefore affect the decision to take a company private. This study complements prior research examining the predictors of public to private transactions and illustrates how behavioral agency theory can provide insight into a major decision regarding the firm's corporate structure. It also extends the behavioral agency model to decisions involving organizational form.

Keywords: public to private transactions; decision theory; governance; agency theory

The process of going private involves the acquisition of a public company’s equity by a private company, which results in the company's stock no longer being publicly traded. Many studies exploring the antecedents of public to private (PTP) transactions use the agency model as their theoretical framework (e.g., Gleason, Payne, & Wiggenhorn, 2007; Opler & Titman, 1993, Weir, Laing, & Wright, 2005a, b). For the most part, these studies examine PTP transactions using financial and stock market variables (e.g. Maupin, 1987) and do not take into account other possible influences on the decision. As noted by Gleason and his colleagues (2007, p. 217), the identification of other factors affecting the decisions to go private is an important research question, but has been outside of the scope of most studies.

Agency theory assumes that agents/managers are motivated by self-interest and might engage in adverse selection or moral hazard with principals/owners, aptly called “agency costs” (Eisenhardt, 1989). The theory espouses that agency costs can be mitigated through two means: close monitoring of agents, and aligning the agents’ interests with those of their principals. Current studies infer that going private becomes necessary when a previously public firm is unable to control agency costs through the traditional solutions of monitoring and alignment. Conversion of a public firm to private ownership alters the firm’s governance structure to a configuration in which management and ownership interests are much less separated, reducing the source of agency costs (Cummings, Siegel, & Wright, 2007; Vogi, 2005).

Transformation of a firm to private status is a far-reaching approach that goes beyond the normal responses used to address the agency issue. This suggests that agency theory cannot fully explain the decision to go private, as other influences also likely serve as factors in making such a major decision affecting organizational form. A broader theoretical perspective will be of assistance in studying the PTP phenomenon. The integration of agency theory with a behavioral approach was advocated by Wiseman and Gomez-Mejia (1998) in their seminal paper on managerial risk taking. Others noted that paying incentives to managers, especially in the form of equity, is supported by agency theory as both a method of ownership control of agents as well as to transform managers into owners and value maximizers (Morck, Shleifer, & Vishny, 1988). Incentive pay, however, means transferring risk to managers, causing the definitional assumptions made by agency theory regarding risk to become both “restrictive” and “naïve” (Wiseman
& Gomez-Mejia, 1998, p. 135). Wiseman and Mejia’s assumption that risk influences behavior in ways not predicted by agency theory is set forth in several of their propositions, which suggest that managers’ decisions may be either risk averse or risk seeking, depending on conditions and managers’ risk preferences. We adopt a similar approach in analyzing the decision to change the firm from public to private status.

This paper contributes by adding a behavioral perspective to extant agency-based studies of the PTP decision and illustrates how behavioral agency model offers insight into phenomena not explained by agency theory alone. First is a review of research on the decision to go private. We then discuss the concepts of risk and risk perception, which have been developed in decision theory and are the basis of the behavioral agency model, and explore how equity ownership of a firm’s executives might affect their perceptions of the risks of going private and hence affect the decision to go private. Several hypotheses based on this model are proposed and tested. Results and implications for research conclude the paper.

**LITERATURE REVIEW OF THE ANTECEDENTS OF GOING PRIVATE**

The decision to go private has its theoretical underpinnings in agency theory (Froud & Williams, 2007). In public corporations, agency costs might be incurred because free cash flows are spent by managers in ways such as excessive compensation and unprofitable diversification that do not earn positive net cash flows. Such firms are more likely to go private (Jensen, 1986). While studies of firms that went private during the 1980s confirmed this supposition (Lehn & Poulsen, 1989; Opler & Titman, 1993; Rao, Waters, & Payne, 1995), this factor became less prevalent in the subsequent wave of PTP activity between 2003 and 2007 (Bharath & Dittmar, 2010; Weir et al., 2005b).

As agency costs are likely to affect all public corporations to some extent, the question arises why some firms decide to go private while others remain public. Managerial economists point to internal financial conditions as predictors of going private, and the prevalent financial factor in the going private decision is low market value (Andres, Betzer, & Weir, 2007; Bharath & Dittmar, 2008; Gleason et al., 2007; Maupin, 1987; Rao et al., 1995; Weir et al., 2005a, b). These studies are generally in agreement that undervaluation of the company makes it an attractive PTP candidate (Renneboog & Simons, 2005). Low market value indicates that the public firm has few investment opportunities, as low market-to-book ratios reflect poor investor perception of future reinvestment (Gleason et al., 2007). The ability of this firm to raise additional capital is limited, as the cost of raising capital in public markets becomes too expensive. As a result, the primary benefit of being a public corporation is diminished.

Performance variables are possible predictors of a PTP decision, as poor performance may be indicative of agency problems; however, empirical results fail to establish the relationship. For example, Block (2004) found that the absence of liquidity, defined as the inability to raise funds, was a key reason to go private. Since liquidity is a benefit of being public, the liquidity benefit decreases, the tendency to go private increases (Bharath & Dittmar, 2010). However, Gleason and colleagues (Gleason et al., 2007) found that firms with high balance sheet liquidity were attractive acquisition targets because managers of the buyout firm could take the firm private and use the cash for its restructuring. The large amounts of cash meant that the firms did not need to raise funds in capital markets, thus negating the need to remain public. Although Andres, Betzer, and Weir (2007) hypothesized that illiquidity would result in favorable investor reaction to the PTP announcement, their findings were inconclusive. Empirical studies testing whether financial distress would lead to private status also produced mixed results. An early study found strong evidence that the potential for financial distress reduced the likelihood of going private (Opler & Titman, 1993), while a more recent study found the converse (Gleason et al., 2007), and another concluded that financial distress costs were not critical to the decision (Weir, Laing, & Scholes, 2008).

Agency theory suggests that weak governance precipitates the decision to go private. Support has been found for the non-optimal governance structure of CEO/Chair duality and going private, but not for a low percentage of outside directors (Weir et al., 2005b). When block holders own large equity stakes in a firm, it is expected that they monitor their investments, and thus the potential benefits from going private are mitigated. Accordingly, the stock price reaction to the going private announcement is higher for companies with scattered shareholdings due to the potential for efficiency improvements (Andres et al., 2007; Renneboog, Simons, & Wright, 2007). Other studies conclude that higher ownership concentration diminishes the benefits of being public, and may therefore encourage the decision to go private (Bharath & Dittmar, 2008). Alternatively, because the controlling shareholders are likely to be...
part of the acquisition group, the concentration of ownership is favorably related to the likelihood of going private (Koenig, 2004). Threats of a hostile takeover bid, another governance mechanism (Manne, 1965), may also be predictive of a firm's going private, as shareholders might use the PTP transaction to thwart such a threat. Nevertheless, PTP firms were not found to face a greater threat of hostile acquisition (Weir et al., 2005b).

Outside the domain of agency theory, macroeconomic factors affecting the PTP decisions have generally included the supply of credit in the economy and state of regulation. Low-cost credit fuels going private, as is evidenced by the rapid decline of PTP activity with the credit market crunch starting in mid-2007. When the availability of bank loans is large, the likelihood of going private increases due to the importance of bank financing for the transaction (Bharath & Dittmar, 2008). Since the passage of the Sarbanes-Oxley Act of 2002, attention has turned to regulatory pressures and the costs of being public. Several have found a positive relationship between increased regulatory burden and going private (e.g., Block, 2004; Engel, Hayes, & Wang, 2007).

The inference that can be drawn from the extant literature is that agency costs cannot solely determine whether a public company becomes private. This inference leads us to assume that other factors remain to be explored in the PTP process, and we focus on the role of risk.

THE DECISION TO GO PRIVATE: TOWARD A BEHAVIORAL AGENT APPROACH

Most of the early literature on managerial risk assumed that individuals are risk averse, and that one's propensity toward risk aversion is a stable attribute (Das & Teng, 2004). Based on these assumptions, agency theory presumes that managers are risk averse and will tend to favor less risky strategies. To discourage managerial risk aversion, agency theorists contend that by including incentive-based pay in executives' compensation, managers are more likely to act in the shareholders' interests because their risk preferences become aligned with those of the owners (Jensen & Meckling, 1976). Recognizing that empirical studies did not conclusively support this argument, Wiseman and Gomez-Mejia (1998) developed a behavioral agency model that combines elements of both agency and decision theories to explain why the risk inherent in incentive compensation affects executive decision-making. Relying on this model, we examine the effect of executive equity ownership on the decision to go private.

While agency theory makes normative assumptions regarding a decision-maker's choices based on rational expectations and utility maximization, decision theory takes into account the decision maker's risk perceptions and preferences, which depend on how a decision is framed, previous gains or losses, and individual risk-taking tendencies (Mukherji & Wright, 2002). We use the definition of risk as set forth by Sitkin and Pablo (1992): risk is the characteristic of decision-making that captures the degree of uncertainty regarding whether an expected, favorable outcome or an unexpected, disappointing outcome will occur. The degree of uncertainty often depends on the lack of knowledge about potential outcomes (Daft & Lengel, 1986) and the lack of control over outcome attainment (Sitkin & Pablo, 1992). The model known as the behavioral model of decision making identifies other factors affecting the risk of a decision, such as preferences, frames, and decision context (Allen, Renn, Moffitt, & Vardaman, 2007; Das & Teng, 2001). Utilizing the behavioral model of decision making, which includes prospect theory and the endowment effect, we will develop a framework regarding the effects of decision makers' equity in the firm, a common prescription of agency theory, on their risk perception of the decision to go private.

In decision theory, “risk” reflects the variation in the distribution of possible decision outcomes, their likelihoods, and their relative values (March & Shapira, 1987). The extent to which there is uncertainty about whether an undesirable outcome may result and the significance of such result make a decision more (or less) risky (Sitkin & Pablo, 1992). Decision risk can be used to characterize a particular decision alternative compared to other alternatives (Sitkin & Weingart, 1995). However, as noted by Wiseman and Gomez-Mejia (1998), risk perception is an important influence on a manager's assessment of risk and is affected by whether the decision is framed in positive or negative terms. An empirical study found support that the risk perceptions of managers are not stable, and depend on their perception of potential gains or losses (Larraza-Kintana, Wiseman, Gomez-Mejia & Welbourne, 2007), which supports the behaviors espoused by both prospect theory and the endowment effect.

Developed by Kahneman and Tversky (1979) from their study of decision making, prospect theory states that de-
decisions are impacted by how decision-makers frame the alternatives. If an alternative is framed in a positive light, individuals tend to become more risk averse regarding other alternatives and more risk seeking if an alternative is framed negatively (Tversky & Kahneman, 1981). Potential losses also shift a decision-maker’s attention toward more risky and novel solutions, rather than well-established routines and procedures (George, Chattopadhyay, Sitkin, & Barden, 2006). Further, decision-makers tend to evaluate alternatives against a relevant benchmark or “reference point” (Kahneman & Tversky, 1979, p. 277). If known alternatives are preferable relative to the reference point, decision-makers will exhibit the risk-averse behavior of sticking with the alternatives, but will become increasingly risk seeking if the alternatives fall below the reference point. Further, risk-taking behavior for alternatives far below the reference point is more precipitous than the risk-averse behavior associated with those above the point (Kahneman & Tversky, 1979, p. 279).

Risk-taking behavior is also impacted by the endowment effect, which suggests that because people identify with their possessions, the value that a person places on an object substantially increases when the person takes possession of the object (Jervis, 2004). In the case of a certain gain, a person would be loss averse—i.e., would not want to risk losing such gain—because of the value attached to that gain. Thus, individuals would rather make a safe decision and give up the potential of gaining additional resources than risk losing what they already possess (George et al., 2006). But in the case of certain losses, the tendency for risk aversion diminishes. An inference that results from the endowment effect is that decision makers view opportunity costs related to threats differently than “out-of-pocket” costs: “Foregone gains are less painful than perceived losses” (Kahneman, Knetsch, & Thaler, 1991, p. 203). Samuelson and Zeckhauser (1988) further noted the existence of a status quo bias, a preference for the current state, because the disadvantages of change appear greater than its advantages (Kahneman et al., 1991).

The Risks of Going Private

We posit that the decision to go private arguably involves a high degree of risk and that the decision of whether to engage in the risks associated with a PTP transaction will depend on decision-makers’ risk perception. We also posit that their risk perception, in turn, will be affected by their equity investment in the firm. Birdthistle and Henderson (2009) commented that going private deals are inherently risky because the conflicts of interests that exist among investors, managers, and fund advisors create a great deal of uncertainty among the participants in the process. Further, the decision to go private involves risk because it affects the fundamental structure of the corporation. During the period of public ownership, companies are likely to grow and adopt established routines consistent with expectations of their public shareholders. Those relationships vanish with private ownership making the firm’s future organizational configuration much less certain.

Public companies are often taken private specifically for the purpose of allowing companies to adopt a high-risk strategy, with the hopes of a high return several years into the future (Davis, 2009). In addition, it is typical for newly private companies to rely heavily on debt rather than equity financing, creating a higher debt-to-equity ratio. To the extent that private firms are highly leveraged, they will have greater incentives to make riskier decisions with the possibility of high payoffs (Greenfield, 2008) that accrue to owners (Schneider & Valenti, 2011). In addition, increased borrowing increases the risk of insolvency if the business is not successful (Davis, 2009). Thus, despite reports of extremely large profits made by private equity firms, 40% of private equity deals fail to even cover acquisition costs (Kelly, 2007). Their highly leveraged capital structure means that PTP firms tend to have a fragile financial structure (Weitzer & Darroch, 2008) and a heightened risk of bankruptcy (Guo, Hotchkiss, & Song, 2008).

The illiquid nature of the private firm also contributes to overall risk, as it becomes difficult to assess the potential risks and rewards. Investments in private equity funds are illiquid, as the life or lock-up period of private equity funds is generally three to seven years. Illiquidity restricts ownership transfer, as the investment is attractive only to investors with sufficiently long time horizons. In addition, the timing of future cash flows is unknown (Phalippou & Gottschalg, 2009). Fluctuations in private equity fund values, those funds which invest in firms that have converted to private status, do not necessarily reflect any intrinsic variability in returns or underlying risk of their portfolio firms (Weidig, Kemmerer, & Born, 2005).

While we acknowledge that under some circumstances remaining public may entail a greater level of risk, for exam-
ple, when a firm faces a necessary but costly restructuring and has particularly demanding public market shareholders, we propose that since going private involves a high degree of uncertainty, this decision is inherently more risky in most circumstances than is maintaining public status. We next evaluate the impact of executive ownership on this risky decision.

The Effects of Executive Ownership on the Decision to Go Private

Agency theorists posit that managers’ interests become more aligned with those of the shareholders when they own a substantial portion of the firm’s equity (Jensen & Meckling, 1976), and they become more likely to make decisions to maximize long-term shareholder wealth (Demsetz, 1983). The perceived advantages of the firm’s public or private ownership must therefore consider the effects of equity ownership of the firm’s managers. Agency theory clearly advocates for ownership of corporate stock by management. While managers are normally interested in pursuing short-term performance objectives, their interests become more aligned with those of the shareholders when they own a substantial portion of the firm’s equity (Jensen & Meckling, 1976), and they become more likely to make decisions to maximize long-term shareholder wealth (Demsetz, 1983). Research confirms that executive ownership in the public firm is positively associated with its entrepreneurship (Zahra, 1996) and R&D spending (Hill & Snell, 1988; 1989). However, agency theorists also suggest that as insider shareholdings become concentrated, the insiders become entrenched, for their ownership stakes provide them with significant power to guarantee their own employment (Morck et al., 1988). Agency theorists, however, have tended to examine the effects of managerial entrenchment solely with respect to firm value and ignore other consequences such as the decision to go private.

Decision theory analysis can be used to extend the predictions of agency theory and explaining the effects of concentrated ownership by managers. As their personal wealth becomes increasingly dependent on their equity in the company, managers’ portfolios become less diversified, and loss minimization rather than wealth maximization is of paramount concern (Latham & Braun, 2009; Wiseman & Gomez-Mejia, 1998). The endowment effect assumption similarly predicts that ownership of a substantial number of shares causes shareholders to place an unrealistic value on their stock, and therefore, they become less likely to make decisions that they perceive could result in a loss. Sanders (2001) found that when executives owned large amounts of company stock, they were less likely to engage in risky activities such as acquisitions, and going private can be considered as a form of acquisition. Latham and Braun (2009) found that managers with greater stock ownership bore an increased residual risk than did other managers and therefore engaged in less risky business investments in order to safeguard their personal investments. Evidence from publicly held, family-controlled corporations, which we suggest provides further insight into the case of publicly held firms with concentrated managerial ownership, indicates that family owners are more likely to avoid value-adding transactions deemed too risky (Anderson & Reeb, 2003). These findings suggest that executives with sizeable equity shareholdings in their firms will maintain the status quo and seek loss minimization rather than engage in the risky activity of going private.

Hypothesis 1: There will be a negative relationship between the value of executive ownership and a company’s going private.

We suggest that under certain circumstances ownership stakes by management will facilitate the decision to go public (Maupin, 1987). Prospect theory predicts that poor performance results in negatively framed decisions (Sanders, 2001). If stock prices decline below a target or threshold level, investors will be risk seeking and will favor the private status option if they intend to remain invested in the company. Escalation of commitment theory also supports this course of action (Arkes & Blumer, 1985). Investors will perceive an opportunity to recoup their past losses associated with the previously private entity by investing in the newly privately entity. If instead the public company has produced gains for its shareholders, they will be less inclined to “risk” going private. After all, if their investment has been fairly successful, there is little incentive to change the ownership structure of the organization. Conversely, a drop in share price below some threshold motivates owners to consider private status to avoid further declines and recoup prior losses.

As shareholdings become more concentrated, the effects of risk become more pronounced. While decision theory suggests that declines in share price result in riskier decision making, agency theory assumes that owners are well diversified and thus are not greatly affected by a loss to a small portion of their portfolios (Jensen & Meckling, 1976).
When the percentage of shares is concentrated in the hands of a few owners, ownership in a significant block of stock in a corporation might tend to represent a significant portion of the investor’s overall net worth. Ownership of a sizeable portion of a company often cannot be easily divested, making the opportunity for future ownership dispersion difficult. Thus, we suggest that the combination of decline in share price and concentration of ownership creates a scenario favorable to going private.

We propose that if a manager’s personal wealth is largely dependent on the firm’s value, the effect of a decline in its share value will greatly affect his/her overall personal wealth. In such circumstances, prospect theory holds that the manager will be more willing, rather than less willing, to take the company private regardless of whether the transaction is management-initiated. In other words, managers faced with a certain loss of wealth will become risk seeking and will opt for an increase in variation, with the hopes that private status will reverse declines. The research of March and Shapira (1987, p. 1409) confirms that managers tend to take more risks in “bad situations,” which supports prospect theory regarding increased risk taking when operating below one’s reference point. We therefore propose the following hypothesis, that share price will moderate the relationship between executive equity ownership and the decision to go private.

**Hypothesis 2:** Share price will moderate the relationship between the level of executive ownership and the firm’s going private; as share price declines below a reference value, it will be more likely that the firm will go private.

Stock options, or contracts in which executives are granted the right to purchase shares of stock at a pre-determined exercise price, have been used to align executives’ interests with those of shareholders (Wiseman & Gomez-Mejia, 1998). Because stock options must not necessarily be exercised, there is no downside risk associated with them. If share price declines below the exercise price, the option is simply not exercised, but if the price increases, option holders reap the gains (Sanders, 2001). In addition, agency theory assumes that the option holder does not attach any value to the upside potential of their unexercised options (Devers, Wiseman, & Holmes, 2007). Taken together, stock options should encourage executives to engage in corporate strategies that are less risk averse (Bryan, Hwang, & Lillien, 2000; Devers, McNamara, Wiseman, & Arrfelt, 2008). Empirical studies have shown that proposals to increase managerial option awards are met with positive share price reactions (e.g., DeFusco, Johnson, & Zorn, 1990). Agrawal and Mandelker (1987) found that acquisitions and divestitures were more likely to be made by firms with executive compensation contracts having a large option component.

Despite these predictions, studies have shown that managers overvalue the stock options awarded to them (Devers et al., 2007; Larraza-Kintana et al., 2007). They suggest that holders’ subjective value of their options exceed normative valuations due to the influences of the endowment affect and loss aversion. Using the assumptions of the behavioral agency model, stock options have an intrinsic value and will therefore be perceived to instantly endow the holder with wealth, even though possible exercise of the option may never occur or may occur several years into the future (Larraza-Kintana et al., 2007). Thus, as previously found, the value of unexercisable stock options should negatively affect executive risk-taking and the decision to go private. In the case of options which are exercisable and for which the fair market value exceeds the exercise price, however, the decision to go private will not be affected. Regardless of whether the company remains public or is taken private, the executive can exercise the option, immediately sell the stock and recognize a profit. There is no inflated perceived value associated with positively valued exercisable options and therefore no endowment effect.

**Hypothesis 3a:** There will be a negative relationship between the value of unexercisable stock option grants and a company’s going private.

**Hypothesis 3b:** No relationship will exist between the positive value of exercisable stock option grants and a company’s going private.

**RESEARCH DESIGN**

**Sample Selection**

The dependent variable in our study is whether or not a public firm went private. We used a matched-pair sample
design that involves choice-based sampling, appropriate when random sampling would yield a small number of suitable cases (Amemiya, 1985). Matched-pair sample design has been used in a number of management studies, including those investigating whether firms misreported financial results (O’Connor, Priem, Coombs, & Gilley, 2006), divested formerly acquired units (Shimizu, 2007), or recovered from a previous decline (Mueller & Barker, 1997). It has also been used in several studies of going private that focused on financial antecedents of the event (Gleason, Payne, & Wiggenhorn, 2007; Weir, Laing, & Wright, 2005a).

We first identified U.S. public firms that filed SEC Form 13E3/A, which indicated the firm’s decision to go private, between 2003 and 2007, using the Lexis/Nexis database. This produced 2,471 filings, although many of them were identified as duplicates for the same company because of refilings for amendments or addendums to the schedule. From that data base, we selected a random sample of 150 firms and ensured that the filing was in fact the original filing for the subject firm. We then attempted to match each of these firms (the test group) by industry, using the two- or four-digit SIC code with a U.S. public firm that did not make such an filing and that we verified remained public through 2009 (the control group). In some cases an appropriate match was not available, and in other cases the independent variables were not fully available for a test firm or a control firm. Our final sample of 100 matched pairs falls within the range of sample size of existing matched-pair studies (e.g., O’Connor et al., 2006 = 65; Weir, Laing, & Wright 2005a = 95; Gleason, Payne, & Wiggenhorn 2007 = 215). The final sample was checked to ensure that no one industry dominated the field.

**Independent and Control Variables**

All independent and control variables were collected through secondary resources, specifically the proxy materials filed with the SEC and Compustat. We collected data for each test firm and its matched control firm for three years: the year immediately preceding the year in which Form 13E-3/A was filed, and the two previous years.

**Independent Variables.** The value of the shares owned by the CEO and the non-CEO executives in the aggregate, as well as the number and value of the CEO’s and executives’ exercisable and unexercisable options, were determined from the proxies covering the year immediately preceding the year in which Form 13E-3/A was filed. Share price change was calculated as the difference in price at the close of the year immediately preceding the year in which Form 13E-3/A was filed and the price at the close two years prior. Interaction variables were developed by first mean-centering the predictor variables and then calculating the product terms, as is recommended (Jaccard, 2001).

**Control Variables.** Previous research on the decision to go private found that firm size and market capitalization were negatively related to going private (Bharath & Dittmar, 2010; Gleason et al., 2007; Renneboog, Simons, & Wright, 2007; Weir et al., 2005a). Accordingly, we include market capitalization and firm size (log of assets) as control variables. Other control variables we employed that are commonly used in the governance literature include the percentage of outsiders on the board (Baysinger & Hoskisson, 1990; Mace, 1986; Zajac & Westphal, 1994) and percentage of ownership held by institutional or joint venture investors; both are proxies for shareholder monitoring of corporate management (Davis, 1991; Johnson & Greening, 1999; Rediker & Seth, 1995). Firm performance has also been cited as a reason to take a corporation private (Gleason et al., 2007) and is often used as a control in governance studies (e.g., Berger, Ofek, & Yermak, 1997). Here we used return on assets. Consistent with prior studies which noted the importance of share ownership as a predictor variable (Maupin, 1987; Weir et al., 2005b), ownership concentration was included as a control. Ownership concentration was determined as of the close of the year immediately preceding the year in which Form 13E-3/A was filed; it is the percentage of ownership reported by the CEO, executives, board members, and other shareholders owning five percent or more of the corporation’s shares. Finally, CEO age was included as having been recognized as a personal characteristic of the CEO which influences risk-taking (Larraza-Kintana et al., 2007).

**DATA ANALYSIS AND RESULTS**

As our dependent variable is binary, our hypotheses were tested using conditional stepwise binary logistic regression (Field, 2000). This method is appropriate for estimating models with matched pairs designs (O’Conner et al., 2006) and provides us with key statistics, including the Hosmer and Lemeshow, Wald, and exp(B) statistics. Means, standard deviations, and correlation coefficients are reported in Table 1, Parts A and B.
Table 1, Part A
Means, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>S.D.</th>
<th>Went Private</th>
<th>Log Market Cap</th>
<th>Log Market Cap</th>
<th>Outsider %</th>
<th>Inst. Ownership %</th>
<th>Joint Venture %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Went Private</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Market Cap</td>
<td>3751</td>
<td>11176</td>
<td>-.300**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
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<td>15.11</td>
<td>-.100</td>
<td>.013</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outsider %</td>
<td>.7232</td>
<td>.1502</td>
<td>-.065</td>
<td>.106</td>
<td>-.088</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inst. Ownership %</td>
<td>.0913</td>
<td>.1364</td>
<td>-.218**</td>
<td>-.011</td>
<td>-.032</td>
<td>.067</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Joint Venture %</td>
<td>.0457</td>
<td>.1055</td>
<td>.119</td>
<td>-.075</td>
<td>-.036</td>
<td>.122</td>
<td>-.043</td>
<td>1</td>
</tr>
<tr>
<td>Owner Concentration</td>
<td>.4456</td>
<td>.4108</td>
<td>.375**</td>
<td>-.260**</td>
<td>-.078</td>
<td>-.052</td>
<td>.032</td>
<td>.197**</td>
</tr>
<tr>
<td>CEO Age</td>
<td>54.29</td>
<td>9.906</td>
<td>-.097</td>
<td>.006</td>
<td>.025</td>
<td>-.059</td>
<td>-.035</td>
<td>-.128</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>1.1854</td>
<td>1.1358</td>
<td>.100</td>
<td>-.084</td>
<td>-.092</td>
<td>-.134</td>
<td>-.115</td>
<td>-.020</td>
</tr>
<tr>
<td>Share Price Change</td>
<td>-35.56</td>
<td>34.06</td>
<td>.435**</td>
<td>-.360**</td>
<td>.027</td>
<td>-.199**</td>
<td>-.143*</td>
<td>.126</td>
</tr>
<tr>
<td>CEO Share Value</td>
<td>6.6418</td>
<td>1.3592</td>
<td>-.303**</td>
<td>.269**</td>
<td>-.077</td>
<td>.155*</td>
<td>.126</td>
<td>-.065</td>
</tr>
<tr>
<td>Exec Share Value</td>
<td>5.6026</td>
<td>2.473</td>
<td>-.301**</td>
<td>.226**</td>
<td>-.051</td>
<td>.372**</td>
<td>.161*</td>
<td>.064</td>
</tr>
</tbody>
</table>

Note. **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Table 1, Part B
Means, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>S.D.</th>
<th>Owner Concentration</th>
<th>CEO Age</th>
<th>Return on Assets</th>
<th>Share Price Change</th>
<th>CEO Share Value</th>
<th>Exec Share Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Concentration</td>
<td>.4456</td>
<td>.4108</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Age</td>
<td>54.29</td>
<td>9.906</td>
<td>.011</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Assets</td>
<td>1.1854</td>
<td>1.1358</td>
<td>.143*</td>
<td>.052</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Price Change</td>
<td>-35.56</td>
<td>34.06</td>
<td>.299**</td>
<td>-.074</td>
<td>.122</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Share Value</td>
<td>6.6418</td>
<td>1.3592</td>
<td>.009</td>
<td>.152*</td>
<td>-.071</td>
<td>-.404**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Exec Share Value</td>
<td>5.6026</td>
<td>2.473</td>
<td>-.091</td>
<td>-.010</td>
<td>-.109</td>
<td>-.252**</td>
<td>.379**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).
The first regression model tested the effects of both executive ownership and price change (Hypotheses 1 and 2). In the interest of parsimony, we report only the full model (Table 2). The model’s Hosmer and Lemeshow statistic was .80, well above the threshold of .05, indicating an overall good fit in binary regression (Field, 2000). The model correctly predicted 83.0 percent of the cases overall. This is a statistically significant improvement from the classification percentage that results (50%) when no predictor variables are included in the model (Pallant, 2010).

Table 2

<table>
<thead>
<tr>
<th>B (Log Market Cap)</th>
<th>S.E.</th>
<th>Wald*</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)**</th>
<th>95% C.I. for Lower</th>
<th>95% C.I. for Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>.000</td>
<td>.000</td>
<td>2.558</td>
<td>1</td>
<td>.110</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

| Log Assets | -.021 | .023 | .833 | 1  | .361 | .979 | .937 | 1.024 |
| Outsider Percentage | 2.559 | 1.816 | 1.985 | 1  | .159 | 12.928 | .368 | 454.589 |
| Institutional Ownership | -4.975 | 1.632 | 9.292 | 1  | .002 | .007 | .000 | .169 |
| Venture Cap Ownership | -2.606 | 2.287 | 1.298 | 1  | .254 | .074 | .001 | 6.530 |
| Owner Concentration | 4.886 | 1.100 | 19.718 | 1  | .000 | 132.465 | 15.327 | 1144.869 |
| CEO Age | -.025 | .022 | 1.308 | 1  | .253 | .976 | .935 | 1.018 |
| Return on Assets | -.170 | .185 | .843 | 1  | .359 | .844 | .587 | 1.213 |
| Price Change | .156 | .064 | 5.881 | 1  | .015 | 1.168 | 1.030 | 1.325 |
| Log CEO Value | -.624 | .264 | 5.605 | 1  | .018 | .536 | .319 | .898 |
| Log Executive Value | -.382 | .199 | 3.683 | 1  | .055 | .682 | .462 | 1.008 |
| CEO Val x Price Change | -.081 | .064 | 1.593 | 1  | .207 | .923 | .814 | 1.046 |
| Exec Val x Price Change | -.005 | .004 | 1.961 | 1  | .161 | .995 | .987 | 1.002 |

Note. N=200
Chi Sq=121.12
R Sq=.454 (Cox and Snell); .606 (Nagelkerke)
-2LL=156.138
Hosmer and Lemeshow=.80
Percent Predicted=83
*Wald test statistic
**Odds ratio

Of the control variables, institutional ownership percentage and ownership concentration were significantly related to the decision to go private, and were negative and positive, respectively. This suggests that firms with little institutional investment but having other types of block holders, such as founding family members and hedge fund investors, are more likely to go private than their counterparts.
To test Hypothesis 1, we first included only the value of the shares owned by the CEO and by all other executives collectively as well as a price change variable. The mean value of shares owned by the CEO was $51,287,303, and by all the executives as reported in the proxy, $16,240,704. The model’s Hosmer and Lemeshow Test showed significance of .380, and the model accurately predicted 82.0 percent of the cases. The coefficients for both ownership variables were negative and was significant for CEO ownership (p<.05), indicating that the higher the value of the shares owned by the CEO, the less likely the firm will go private. Thus, Hypothesis 1 was supported with respect to shares owned by the CEO but was only marginally supported at the p=.055 level regarding senior executives. The price change variable was also negative (-.010) but not significant.

We then added a product variable to test for an interaction effect between the change in share price and CEO ownership. As seen in Table 2, adding the interaction variables did not affect either the sign or the significance of the CEO or executive ownership predictor variables. Further, the confidence interval for the Exp(B) of the interaction term contained the value of 1.0, indicating that the interaction effect was not significant (Jaccard, 2001). Thus, the endowment effect (Hypothesis 1) holds, and Hypothesis 2 is not supported. Interestingly, adding the product term caused the price change variable to become positive and significant, further supporting the endowment effect. An incremental increase in share price makes the decision to go private less likely as CEO ownership increases. Table 2 summarizes the results from these two analyses.

A second regression was estimated using a subset of the sample to include only those firms which use stock options in their CEO or executive pay packages, thereby reducing the number of observations to 78 matched pairs. The model’s Hosmer and Lemeshow statistic was .526, and the model correctly predicted 86.7 percent of the cases. Only the value of the CEOs’ exercisable options was positive and significant, indicating that a company is more likely to go private when the CEO holds “in the money” exercisable options. None of the other predictor variables were significant in the model. Of the control variables, ownership concentration was significant and positive, as in the previous regression, and market capitalization was significant and negative, as has been found in previous studies (e.g., Bharath & Dittmar, 2010; Gleason et al., 2007).

DISCUSSION

In examining the decision to go from public to private status, reliance on an agency-theoretic prescriptive approach has been at the forefront of contemporary research. Unrelated to this stream of research, management studies have long begun to incorporate the element of risk in strategic decision-making (Bromley, 1991; Fiegenbaum & Thomas, 1988). Recent decision studies have included the divestiture of formerly acquired units, using a combination of prospect theory, behavioral theory, and the threat-rigidity thesis (George et al., 2006; Shimizu, 2007) and the effects of executive compensation design on firm risk, using the behavioral agency model, agency theory, and prospect theory (Devers et al., 2008; Wiseman & Gomez-Mejia, 1998). Drawing from these approaches, this paper sought to determine the extent to which extant research on private equity will be informed by use of behavioral decision theories.

Hypothesis 1 tested the endowment effect, proposing that the extent of the equity holdings of CEOs and managers provide a frame of reference that affects their support or disagreement with the transaction. While an endowment effect was seen with respect to shareholdings by the CEO, it was not observed for non-CEO executives. One reason could be simply that the CEO is the most powerful actor in organizations and has the most influence in major strategic decisions than other executives (Rajgopal & Shevlin, 2002). CEOs have a disproportionate impact on the outcomes of the firm; thus their decision-making is the most critical to organizational structure. Further, the mean value of CEOs’ shares was significantly greater than that of other managers, suggesting that the endowment effect is more pronounced when shareholdings are substantial. From a financial perspective, the more stock owned by interested parties, the greater the owner’s sensitivity to risk (Latham & Braun, 2009). This finding generally supports Wright and colleagues (Wright, Ferris, Sarin, & Awasthi, 1996), who observed that when executives have a low level of equity ownership, their stockholdings encourage risk-taking, but as ownership grows, their risk-taking is reduced. Our results support the endowment effect theory regardless of the change in share price, and further, that as shares become more valuable due to stock price increases, the endowment effect becomes more pronounced. These findings differ from previous conclusions which suggested that stock ownership by managers and directors increased the likelihood of going private because these influential parties are in a position to facilitate the transaction (Maupin,
### Table 3

*Logistic Regressions Predicting the Effects of Exercisable and Unexercisable Options on the Decision to Go Private*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald*</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)**</th>
<th>95% C.I. for Lower</th>
<th>95% C.I. for Upper</th>
<th>EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Market Cap</td>
<td>-1.060</td>
<td>.501</td>
<td>4.471</td>
<td>1</td>
<td>.034</td>
<td>.347</td>
<td>.130</td>
<td>.925</td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>-.027</td>
<td>.091</td>
<td>.087</td>
<td>1</td>
<td>.769</td>
<td>.974</td>
<td>.815</td>
<td>1.163</td>
<td></td>
</tr>
<tr>
<td>Outside Board Percent</td>
<td>.100</td>
<td>1.458</td>
<td>.004</td>
<td>1</td>
<td>.945</td>
<td>1.105</td>
<td>.063</td>
<td>19.248</td>
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<tr>
<td>Institutional Ownership</td>
<td>-3.275</td>
<td>2.969</td>
<td>1.217</td>
<td>1</td>
<td>.270</td>
<td>.038</td>
<td>.000</td>
<td>12.728</td>
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<td>Venture Cap Ownership</td>
<td>-.031</td>
<td>2.642</td>
<td>.000</td>
<td>1</td>
<td>.991</td>
<td>.969</td>
<td>.005</td>
<td>171.932</td>
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<tr>
<td>Owner Concentration</td>
<td>4.386</td>
<td>1.128</td>
<td>15.123</td>
<td>1</td>
<td>.000</td>
<td>80.350</td>
<td>8.808</td>
<td>733.004</td>
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<tr>
<td>CEO Age</td>
<td>-.023</td>
<td>.025</td>
<td>.857</td>
<td>1</td>
<td>.355</td>
<td>.977</td>
<td>.930</td>
<td>1.026</td>
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<tr>
<td>Return on Assets</td>
<td>.142</td>
<td>.427</td>
<td>.111</td>
<td>1</td>
<td>.739</td>
<td>1.153</td>
<td>.499</td>
<td>2.661</td>
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<tr>
<td>CEO Value Exercisable</td>
<td>.559</td>
<td>.261</td>
<td>4.582</td>
<td>1</td>
<td>.032</td>
<td>1.749</td>
<td>1.048</td>
<td>2.918</td>
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<tr>
<td>CEO Value Unexercisable</td>
<td>-.212</td>
<td>.227</td>
<td>.876</td>
<td>1</td>
<td>.349</td>
<td>.809</td>
<td>.518</td>
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<td>Executive Value Exercisable</td>
<td>-.062</td>
<td>.268</td>
<td>.054</td>
<td>1</td>
<td>.816</td>
<td>.940</td>
<td>.556</td>
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<td>Executive Value Unexercisable</td>
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<td>.293</td>
<td>.038</td>
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<td>.846</td>
<td>1.059</td>
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<td>Constant</td>
<td>1.425</td>
<td>2.040</td>
<td>.488</td>
<td>1</td>
<td>.485</td>
<td>4.159</td>
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*Note: N=156
Chi Sq=19.192
R Sq=.192 (Cox and Snell); .358 (Nagelkerke)
-2LL=51.490
Hosmer and Lemeshow=.526
Percent Predicted=86.7
*Wald test statistic
**Odds ratio

In our study, once the overall effect of ownership concentration was controlled, the direct effects of CEO and executive ownership could be measured; they were negative and, in the case of CEO shares, significant. Our predictions regarding the impact of executive stock option ownership did not develop. The endowment effect was not evident with respect to unexercisable stock options. In addition, the value of CEO exercisable options was positively related to the decision to go private, suggesting that a difference does exist in how executives value stock ownership and stock options. As noted by Sanders (2001, p. 479), the risk and reward characteristics of outright stock ownership are “fundamentally different” than those of stock options and thus will have “distinct effects” on decision-making. Stock options present an opportunity for executives to benefit from increases in stock price that might occur if the company realizes significant gains from decisions that entail a fair degree of risk. At the same time, executives bear
no downside risk if the decision results in a failure, so there is little disincentive for them to select a more risky alternative. Conversely, exercisable options bring both upside and downside risk to executives, akin to the conditions faced by shareholders. Executives holding “in the money” exercisable options are subject to the risk that a decline in share price decreases the spread between the fair market value and the exercise price, thus decreasing the value of the option.

IMPLICATIONS AND FUTURE RESEARCH

Our study contributes to existing research in several important respects. First the results extend the current studies on the public to private decision. Not included in current agency-based studies but included in our hypotheses is the effect of managers’ risk propensity on the decision to go private. We theorized that the decision to go private involves risk, for it affects the fundamental structure of the corporation, and found that CEO ownership had a negative effect on going private. Our findings confirm the strong effect of the subjective value owners place on their property, which causes them to become loss averse.

Conversely, while both agency and prospect theories would suggest that stock price decline might facilitate a risky decision such as going private, our results instead suggest that price increases are more likely to predict the PTP decision (See Table 2). A possible explanation is that the price of the shares rose in anticipation of the company being taken private, as shareholders of the public company tended to benefit from its going private in the form of premiums paid for their shares (Lehn & Poulsen 1989). It is estimated that its public shareholders receive a premium of approximately 40% when a firm goes private (Renneboog & Simons, 2007). We also confirmed a positive relationship between ownership concentration and going private, but found the nuance of a negative effect of institutional ownership, suggesting that institutional owners effectively monitor the corporate management of public firms within their investment portfolio and encourage firms to maintain their public status.

This research also extends the behavioral agency model that has been the basis of several empirical tests. The behavioral agency model is primarily concerned with the construct of compensation risk and its influences on executive behavior (Devers, Cannella, Reilly, & Yoder, 2007). Specifically the model has been used to test whether different pay components have different risk properties thereby predicting risk-seeking or risk adverse behavior. Thus, Larraza-Kintana and colleagues (Larraza-Kintana et al., 2007) found that both the downside risk of essential pay and positively valued stock options were negatively associated with CEO risk-taking. Similarly, restricted stock ownership will also exhibit a negative relationship with firm strategic risk (Devers et al., 2008). In both studies, the executives’ desire to minimize losses exceeded their value to maximize gains. Our findings that outright stock ownership also negatively correlates with CEO risk-taking are consistent with the model. Conversely, our results regarding the influence of CEO and executive exercisable or unexercisable stock options on risk framing do not follow the same logic. In a 2008 study Devers and colleagues (Devers et al., 2008) predicted that the value of unexercisable options exhibits a positive relationship with strategic risk, while stock options which are both exercisable and “in the money” endow personal wealth to the executive and therefore reduce strategic risk investments. In fact, they found a concave relationship between the cumulative value of the exercisable option and strategic risk. Our results did not detect any relationship between risk and unexercisable options, but did find a positive and linear relationship with respect to positive valued, exercisable options. A number of conditions may account for the results, including the possibility that a change in ownership triggers immediate exercisability and an increase in share price due to the potential premium paid to acquire stock by the private equity firm. In summary, a difference exists in how executives value outright stock ownership and stock options, so that the agency-theory inspired reliance on stock and stock options as a general corporate control mechanism might possibly have varying effects.

While our study fills the gap in the current understanding of the decision to go private, it also raises additional questions. For example, contrary to our predictions, a previous decline in stock price did contribute to a managerial preference to go private, suggesting that prospect theory’s general prediction of more risky behavior in loss situations does not apply in all cases. However, our research design accounted for share price change using a long-term window of two years prior to the decision year. Reactions to decreases in share price may be much more immediate and thus quarterly analyses may be more appropriate. Besides timing issues, stock price volatility may be a more complex construct than a simple measure of increases and decreases and may have differing interactive effects on executive...
decision-making depending on factors not taken into account in our research design. Thus, further inquiry into the managers’ overall investment portfolio and other sources of income may shed light on their assessment of share price decline on their net worth. Further inquiry is also needed regarding the role of board of directors’ equity ownership, their investment portfolios, and their other sources of income in affecting the decision to go private. We also suggest a study of an array of competing options available to public firms in changing their organizational form, which include mergers and acquisitions involving another public company, to discern those factors that differentiate the decision to go private versus changing the firm’s organizational form but continue to remain part of a public firm.

Our study covered a unique period of time from 2003 through 2007, when external financing was readily available and private equity firms were involved in nearly half of the PTP deals (Bargeron, Schlingemann, Stulz, & Zutter, 2008). After the economic downturn, credit markets become much tighter, changing the dynamics of the transactions and the parties involved. Nevertheless, many companies might consider exiting the public arena when credit is more easily available, leading to a new era of going private activity, and an understanding of the driving factors may further our knowledge of the effects of risk perceptions on the decision.

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Elementary Principals’ Role in Science Instruction

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This study explores the role elementary school principals play in science education. Specifically, the study employed an online survey of 16 elementary school principals at high-performing campuses in North Texas to explore their perceptions of how they influenced science education on their campuses. The survey used a combination of Likert-type rating scale items and open-ended questions. Responses from elementary principals suggest that the important components of instructional leadership for science included (a) collaboration with teachers, (b) changing teaching assignments, and (c) teacher motivation.

Key words: principal, instructional leadership, elementary, science

Demands of state and federal accountability focus attention on the achievement of elementary school students in science. Elementary schools are often rated based on students’ performance, as are elementary school principals in some states. This study explores the role elementary school principals play in science education. Specifically, the study employed an online survey of elementary school principals at high-performing campuses in North Texas to explore their perceptions of how they influenced science education on their campuses.

The participants in the study were all principals at recognized or exemplary elementary school campuses in North Texas during the 2007–2008 academic year. For purposes of school accountability ratings in Texas, science was first tested in the fifth grade using the Texas Assessment of Knowledge and Skills (TAKS). To achieve a recognized rating, at least 80% of the students tested must have met the minimum expectations; for an exemplary rating, 90% must have met minimum expectations. The campuses were almost all exemplary, with an overall average of 96% of the fifth graders passing the science exam. Over 67% of the students tested on the selected campuses were individually commended for scoring at 90% or above.

METHOD

The purpose of the study was to explore the principals’ perceptions of how they influenced science education on their campuses where achievement in science was high. Elementary school campuses in North Texas with science scores at or above 80% (i.e., 80% or more of the students tested met minimum expectations) in the school year 2007-2008 were identified and invited by email to participate in an online survey.

The first section of the survey requested basic information about the participant and the school, and the number of fifth grade students tested in science and test scores. The second section of the survey had rating scale items about (a) the organization of the science program at the school, (b) the importance of a variety of factors principals used to make decisions about science, (c) the influence of a variety of factors on science instruction, and (d) the factors the principals perceived to be most beneficial in improving science instruction on their campuses. The participants were
asked to provide an overall assessment and to respond to one open-ended question about the fifth grade science instruction on their campuses.

The rating scale items were analyzed for descriptive statistics. The responses to the open-ended questions were hand coded and examined for patterns or themes. Thus, while the small number of participants (n=16) was a limitation, some salient points were found.

**FINDINGS**

Four main themes related to effective instructional leadership for elementary science emerged from the data. The findings suggest the importance of (a) encouraging collaboration, (b) aligning the curriculum, (c) implementing modes of teaching science that complement teacher strengths through staff organization, and (d) providing professional development.

**Instructional Leaders and the Importance of Collaboration**

Principals need to be strong instructional leaders who support and collaborate with teachers in science content and instruction (Griffith, 1999). Elementary principals in this study consistently valued their role as instructional leaders. They attributed the student performance on their campuses in science to two main factors. First, they encouraged collaboration with and among the teachers. Second, they were strategic about staffing and teaching assignments—decisions these principals made after collecting and using information about teachers’ science skills and strengths.

While all the principals in the study believed that teachers were doing a “good” or “excellent” job of science instruction on their campuses, the participants acknowledged the importance of collaborating with teachers to build capacity. When principals described factors influencing science on their campus, four principals mentioned working alongside teachers when making decisions about science instruction. They described spending more time working with teachers on science instruction and less time focusing on other management duties in the building. This finding was consistent with that of McGhee and Lew (2007) in their study of principals’ actions that affect writing instruction.

Fourteen of the 16 principals stated they considered teachers’ strengths and relationships with students when making instructional decisions for the campus, with a special focus on teaching assignments (math, science, language arts). Responding principals suggested that teachers are more likely to have a positive impact on student achievement and feel more confident about their teaching methods when allowed to instruct in their areas of strength. Participants also suggested that it is important for principals to be in classrooms making observations in order to assess teacher strengths and weaknesses related to characteristics of quality science instruction: content knowledge and teacher attitudes, pedagogical knowledge, knowledge of students, and a clear understanding of the science curriculum (Gess-Newsome, 1999). Following observation, principals can identify areas needing improvement and can target professional development, peer coaching, or other modes of support for teachers to improve instruction. If teachers improve their science teaching methods, then student achievement in science also should improve. In a recent study of principals’ work to improve instruction, May and Supovitz (2011) found that principals’ work with individual teachers that was very focused was more likely to result in improved instruction than broader, more general professional development.

Participating principals worked collaboratively with teachers to ameliorate weaknesses in science instruction, as suggested by other authors (Bakkenes, de Brabander, & Imants, 1999; Gess-Newsome, 1999; Griffith, 1999). One principal described giving every teacher in the building a science exam that was equivalent to the exam the students were required to take. The teachers struggled with the exam and had to complete it in groups because the process took much longer than expected. As a result, teachers realized how difficult the exam must be for fifth grade students and fifth grade teachers. They became motivated to look at the science objectives for each grade level and align their curricula. As a result, the principal was able to take advantage of a teachable moment and turn frustration with the science exam into motivation to improve science instruction across all grade levels. Accordingly, participants described how they, as instructional leaders, encouraged staff and provided them with the tools and resources to improve curricula and instruction.
Communication and Collaboration

The principals in this study reported giving teachers time to write a curriculum for science to improve the quality of instruction. Additionally, principals reported that a district science coordinator spent many hours collaborating with and assisting teachers with science ideas for all ages of elementary students in order to enhance instruction. According to Blase and Blase (1999), teachers value time given for collaboration and team planning time. Printy (2010) further states that teachers are compelled to improve practice and to learn new skills and argues that teachers learn best and improve most when principals stay engaged with teachers as they collaborate to make decisions about instruction.

Additionally, the principals in this study suggested the importance of having regular, personal contact with all teachers to communicate with them about instruction as other research suggests (Bakkenes et al., 1999; Blase & Blase, 1999; Printy, 2010). These participants expressed concern that in the absence of open and honest conversations about science curriculum, teachers at lower grade levels might continue to focus their time and energy on other subjects that are routinely tested in state exams, like reading and mathematics. Therefore, taking time to have conversations about curriculum was seen as a means to direct teachers’ attention to areas of weakness in the curriculum.

Alignment

Thus, even though science was not tested until students were in fifth grade, principals reported that all teachers on these high-performing campuses understood the importance of teaching each science objective to mastery and reviewing science concepts taught in previous grade levels. Every teacher in the building played an important support role in the school’s fifth grade science scores—accountability for the results was shared rather than belonging to only the principal and the fifth grade teachers.

When one principal was assigned to the campus, “science was not being taught at every grade level or in every classroom. . . . We had to shift the philosophy of the campus.” Several principals from this study indicated the importance of alignment of science instruction between the grade levels. This is important not only for the elementary campus but also for students entering middle school. Elementary science classroom practices (whether positive or negative) have a strong correlation with future outcomes in science in middle school and high school (Rice, 2005).

Further, curricular decisions should be made based on research. All of the participants ranked making teachers aware of scholarly research and best practices in science education as a very important role of the principal. Similarly, Seifert and Vornberg (2002) contended that the principal is responsible for researching instructional programs and providing teachers with information about their instructional options.

Participants more frequently referred to making decisions about science instruction in response to other data, such as student, teacher, or testing feedback, rather than to scholarly research. Whereas these participants said they valued research, they did not say that they selected or implemented programs, practices, or methods based on research or evidence of effectiveness. Moreover, Blase and Blase (1999) indicated that effective instructional leaders use data to make their decisions and are willing to change programs if there is evidence to show the program is ineffective.

Staffing and Organizing for Science Instruction

Another predominant theme emerging from this study targeted the process of deciding how teachers are assigned for science instruction. As one principal described, “We have been . . . departmentalized, partially departmentalized, and self-contained.” This principal moved back and forth between models using student needs and teacher strengths to decide which method was best for a particular school year. When strong content teachers were available, the principal and the teachers would rather be departmentalized for instruction. This allowed teachers to focus on their areas of strength and specialize in a content area (Gess-Newsome, 1999).

From the 16 principals’ responses about the mode of instruction on campus, seven indicated their fifth grade science instruction was departmentalized, with separate teachers for math, science, social studies, and language arts. Five principals stated that their teachers were partially departmentalized, with math and science teachers and social studies and language art teachers delivering instruction. When teachers were asked to move back and forth between instructional programs and “redesign” the programs themselves, principals were encouraging a sense of “flexibility”
and openness to change (Blase & Blase, 1999, p. 365).

However, when a weak group of students enters fifth grade, the teachers would rather be self-contained. According to a principal, they “felt a much stronger connection with all of their students, particularly when it came to the TAKS test.” This model requires teachers to teach all content areas and may lead to greater knowledge about or relationships with individual students (Gess-Newsome, 1999).

The principals’ comments described tough decisions facing elementary administrators in terms of teaching assignments. Effective principals focus on student achievement and, at the same time, attend to effective instruction (Byrd, 2010). These responses suggested that there may not be a correct way to deliver science instruction, but the decisions should be made with teacher and student interests in mind. Teachers have invaluable knowledge about their students’ interests and needs and should be consulted when decisions are made about the curriculum and instruction (Marks & Printy, 2003).

Professional Development

Ten principals selected “professional development in science” as a potential benefit for science instruction on their campus. Nine principals wanted more time with district science coordinators on campus, which could include professional learning and instruction in science teaching techniques. Ten principals thought having teachers with a strong content background teaching science on their campus was beneficial. Monk (2008) described how teacher preparation programs may now provide more science-specific coursework for elementary teachers, but teachers typically have varying degrees of expertise in science content knowledge and instructional methods.

Responses from principals who participated revealed a focus on instructional leadership and science curriculum, but professional development was perceived as less important, based on principals’ comments. Additional research suggests that many elementary teachers are weak in science content knowledge and the skills needed to teach the science curriculum effectively (Gess-Newsome, 1999). Teachers weak in science content may need to be encouraged by their principal to attend professional development activities focused on science (Desimone, Smith, & Uneo, 2006). Principals can promote professional development activities and can open up dialogue about sound instructional practices for teachers (Blase & Blase, 1999).

Some authors have argued that many teachers in the field of science would like more support than they receive from campus administrators and district science-curriculum specialists (Desimone et al., 2006). Although quality professional development may improve science teaching ability, some studies have indicated that teachers are less likely to utilize their new knowledge in the classroom if the principal is not supportive or feels inadequate in the area of science (Prather, Hartshorn, & McCreight, 1988). Thus, teachers are more likely to implement skills and strategies learned from professional development if principals are strong and confident about their own skills in science content knowledge and pedagogy. Whereas principals’ support of science instruction may be shaped by their previous experiences (Youngs, 2007), our findings suggest that principals benefited from participating in science professional development alongside their teachers.

CONCLUSIONS

Few studies have focused on the role principals play in elementary school science instruction. This study analyzed the perspectives of 16 elementary principals from high-performing schools in North Texas. Further insight could be provided by the district science coordinator or the science teachers’ views on the role the principal plays in science instruction, as well as in support of science instruction.

In the area of science program organization, more data are needed to demonstrate whether departmentalized instruction for science is more favorable than self-contained instruction at the elementary level. Principals in this study indicated they would like to use research and best practices in science instruction to make decisions, but there is little research on departmentalization at the elementary level. Because elementary campuses vary in the organization of the elementary science programs, further research may reveal trends in program designs and student achievement.

Although science instruction in these schools has produced high levels in student achievement in the past, the principals perceived room for improvement. Other elementary principals may be able to use the experiences of the prin-
incipals on these high-performing campuses to improve science instruction for all children.

REFERENCES


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Implications of Out-of-Class Engagement: Exploring the Experience of OBU Students

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In addition to learning, the college experience involves building relationships with peers and university faculty. For many students, interactions with faculty take place only in the classroom. For students at small liberal arts colleges, though, students and faculty often meet serendipitously both on and off campus. This study focuses on the unplanned interactions that occur between students and faculty. Data obtained from an interview, a focus group, and a campus-wide survey indicate that students who interact with their professors out-of-class (OOC) gain more value from their college experience and enjoy greater academic success than students who meet their professors in only the traditional academic settings. This study highlights the value of informal student-faculty interactions and suggests that university administrations would do well to foster these types of OOC relationships on their campuses.

Keywords: Out-of-class, student-faculty, affective learning, interactions, administrative influence, retention

A young man arrived at Oklahoma Baptist University (OBU). Few of his former friends were attending the school. He was the first member of his family to enroll in college, and he did not have the expectation of his family to perform academically at a high level. After a year and a half, he dropped out and spent three years doubting whether he should continue his education. After his three-year absence, he reenrolled at OBU and found ways to connect with students and faculty members. When asked about his newfound relationships with faculty members, he acknowledged, “The interaction I had with [my professors] was the make-or-break element of whether I would succeed in college” (personal communication, October 12, 2011). This individual noted that, although he did not have support structures at home, he was able to go to professors with both academic and personal issues and seek their guidance. After graduating from OBU, he attained a Master’s degree in Higher Education and is now employed within an academic institution in the Midwest, working closely with students and helping them navigate their college experiences.

Chickering and Gamson (1987) argued that how professors teach is equally, if not more, important than what is taught. Moreover, Palmer (1998) argued that “good teaching comes from the identity and integrity of the teacher” (p. 13). In other words, who the professor is, is more important than the how or what because, as Palmer stated, great teachers will fuse the subject and students with their own passion in a community of education. Palmer’s claim is seen to be correct: good faculty members have integrity, a strong sense of self-identity, and passion for their subject matter.

University administrators continually seek ways to boost student retention through campus life, whether through intramural sports, Greek organizations, or honor societies; other experiences can also increase retention rates. Student life activities and organizations support student development, as does classroom learning. Beyond the classroom, the faculty-student connections can be easily overlooked. Nevertheless, such connections play a significant role in the overall development of students. The classroom setting is the place where most intellectual growth occurs, but outside-of-class (OOC) interaction with a professor can create in a student a stronger desire to learn and increased commitment to the university.

Though much has been written regarding student-faculty relationships in the university context, little information indicates what makes those encounters especially meaningful. The research effort described in this article sought to respond to the faculty-student context of interpersonal communication that emerges OOC. Specifically, the follow-
ing question was addressed: to what extent do OOC student-faculty connections at small, liberal arts universities (such as Oklahoma Baptist University) affect students’ overall college experiences?

**LITERATURE REVIEW**

From direct feedback with class work to nonverbal cues in the center of campus, every communication act between faculty members and students is important. The literature review describes healthy development strategies of a good undergraduate education, beneficial faculty-student interactions, and students’ responses to out-of-class (OOC) learning activities. Pointing to the value of personal interaction, Anstine and Skidmore (2005) studied the effects of online verses traditional learning, and found that traditional students received higher scores. In general, the literature consistently indicated that online programs are incapable of inspiring the same level of student commitment as traditional institutions. The most significant difference is that face-to-face OOC interactions are essentially nonexistent in an online venue.

Chickering and Gamson (1987) researched for two years and found criticism of undergraduate educational practices at every turn. In light of their findings, Chickering and Gamson created seven principles that could improve higher education: encouraging contact between students and faculty; developing reciprocity and cooperation among students; using active learning techniques; giving prompt feedback; emphasizing time on task; communicating high expectations; and respecting diverse talents and ways of learning. Chickering and Gamson argued that when these principles are used simultaneously, “they employ six powerful forces in education: activity, expectations, cooperation, interaction, diversity, and responsibility” (p. 3). These forces, or characteristics, have been shown to influence students of all races, genders and economic classes, and rest upon 50 years of research. The authors found that “how” a professor taught is as important, if not more, than “what” is taught; therefore, the researchers focused on the former.

Chickering and Gamson (1987) expanded on and provided examples for each of the identified principles. However, it should be noted that the first and most important principle, according to the authors, was student-faculty relationships in and out of the classroom. The authors argued that “knowing a few faculty members well enhances students’ intellectual commitment and encourages them to think about their own values” (p. 5). Yet, all of their principles were realized only when an atmosphere of collaborative learning between students, faculty and administrators was the aim.

Koljatic and Kuh (2001) assessed three of the educational principles of good practices found by Chickering and Gamson (1987): faculty-student interaction; cooperation among students; and active learning. The authors believed that before Chickering and Gamson published their work, universities “excellence was primarily determined by institutional resources and reputation” (p. 351). Koljatic and Kuh sought to discover if university students engaged in these three principles and if there were other variables that led to student engagement.

Seventy-three thousand and fifty undergraduate students from 283 universities were given the College Student Experience Questionnaire (CSEQ), one survey group from 1984 to 1989 took the CSEQ 2nd edition and another from 1990 to 1997 took the CSEQ 3rd edition. Koljatic and Kuh (2001) used the results from these surveys as data for their research to determine if a change in these three “good practices” occurred within universities nation-wide. The authors used roughly 50% of the cases; the same sample of the population was used throughout all the analyses. Each student survey was separated by university into one of three categories for analysis: doctoral-granting universities, comprehensive universities, or liberal arts universities.

Results revealed that the three principles under examination had not increased by any statistical significance over the fifteen years since Chickering and Gamson’s (1987) work. Koljatic and Kuh (2001) stated that the results may have occurred because habits (especially institutional ones) are hard to break or that the faculty and students were not embracing the philosophy of the seven principles that emphasize student learning. However, the researchers did comment that grouping institutions into three categories to measure faculty-student interaction, cooperation among students, and active learning might have been the reason for the lack of change because good practices would be different at each individual institution. Ultimately, Koljatic and Kuh recommended that institutions use the seven principles as a context for improving student learning and student development, because “These good practices [seven principles for good practice in undergraduate education by Chickering and Gamson (1987)] are as-
sumed to be valid and appropriate for promoting learning and personal development for all students at all types of institutions” (p. 352).

In agreement with Chickering and Gamson's (1987) first principle, McKinney, Saxe and Cobb (1998) stated that the undergraduate experience is greatly benefited by OOC experiences with professors. The authors encouraged professors to find means of promoting OOC encounters as a way of advancing student success, explaining that OOC encounters “Are authentic, fit the learning mode of knowledge as constructed, involve active rather than passive learning, and can be collaborative” (p. 3). The experiences students receive from professors in less formal, often serendipitous situations served to develop undergraduates' professional socialization.

McKinney, et al. (1998) distributed a survey to 100 students at Illinois State (ISU) in order to research their perceptions of the idea of professional socialization. Most students defined professional socialization as expectations or normal behaviors in their field, but 41% did not list any ways in which they were involved in the process. In a survey of ISU faculty, many thought the degree of professional socialization was lacking in their department. The researchers previewed 217 college homepages on the web, and only 35% had any mention of OOC interaction with faculty. Throughout the concluding paragraphs of their research, McKinney, et al. (1998) urged institutions to “periodically assess the impact of the OOC environment on students [and] the need to develop a common view of what matters in undergraduate education” (p. 8). The authors also addressed the lasting impact that students receive from interpersonal relationships with faculty, and encouraged professors to seek more OOC contact with students.

Like McKinney, et al. (1998), Pascarella (1980) was interested in exploring how students grow socially, mentally and behaviorally. The author described a student’s interpersonal environment as “The sum of the content… with socializing agents, the frequency of the contacts, and the extent of attractiveness of the source of contact” (p. 546). Pascarella measured evidence of this theory and found that professors are a major factor in students’ interpersonal environment; the more OOC contact with teachers, the more students will absorb the attractive traits of the faculty. Pascarella also noted, however, that other factors, such as students’ background, institutional factors, and other college experiences also influenced students’ undergraduate experience.

Pascarella (1980) stated that career plans were definite for nearly half of the students who had high connections with faculty. However, only about one third of the students who rarely interacted with professors were certain of their career choice. Pascarella also found that there was a positive correlation between the amount of OOC interaction with faculty and general satisfaction with the university. He discussed the fact that high informal interactions with faculty produced students with a higher assembly of academic skills and achievement and an advanced intellectual disposition. Furthermore, Pascarella suggested that students who were associated with the university were more likely to continue and finish their degrees. He ultimately argued that faculty interaction assimilated students to university life and helped with college persistence, academic growth, college satisfaction and certainty of career choice.

In light of the amount of literature focused on pursuing faculty interaction, Cotton and Wilson (2006) carried out a qualitative study that sought to shed light on the experiences of students when interacting with faculty in a university setting. Nine focus groups were conducted at a mid-sized public research college whose undergraduate student program was very competitive. During the focus group discussions, the moderator ensured that everyone was included in the conversation, guaranteeing that each focus group had equal contribution by all 49 students who participated in the research.

As the results were assessed, Cotton and Wilson (2006) found that most students did not have quality or quantity time with faculty, but more often contacted teacher assistants. Some students indicated that they found no reason to go talk to professors unless there was a grade issue. Moreover, they found that many focus group participants felt awkward talking to professors about interests and life pursuits. Although most students rarely interacted with faculty members, the view was that engagement would lead to some type of academic benefit (i.e. higher grade, internship, et cetera).

Cotton and Wilson’s (2006) focus groups provided some insight on the "cost" of having a relationship with a professor (p. 500). Specifically, they stated, “Once you’ve established a relationship, you can’t slack off; you’ve got to maintain performance” (p. 500). Some students would rather avoid faculty in order to avoid a heightened sense of obligation to classroom performance. The focus groups were then guided to discuss factors that hindered and helped teacher
communication. The focus group participants indicated the following as examples of impediments: time constraints, social pressure, indifferent professors, and lack of understanding regarding the faculty’s role. Students from the focus group indicated that students wanted to find common interests with faculty so that conversation could be more natural, and students were more drawn to faculty members who showed extroverted personality in the classroom.

Institutional factors played a major role in the discussion of student-professor interaction. Class size was a recurring theme that disrupted quality and quantity conversation with faculty members. Another impeding factor was the university campus layout. Students said there were few places where undergraduates and professors both congregate, which made OOC interaction difficult. When classrooms and offices were in the department buildings, lingering conversation was more likely to occur. Cotton and Wilson (2006) concluded by reviewing the results found in their qualitative research: limited student-faculty interactions, the influence of social as opposed to academic interaction on students, and little student understanding of the faculty environment. The data emphasized that faculty can be a significant resource, but for various reasons students did not pursue faculty interactions. Findings revealed that when interacting with professors in their department, students find social interaction more important than academic interaction. Lastly, the authors suggested that if students understood the role and duty of faculty, they would be more likely to approach their professors.

The OOC experiences of undergraduate students served as foundational data in Kuh’s (1993) research, which was supported by Cotton and Wilson’s (2006) claim that social time with professors was more influential in some cases than academic time. Kuh’s intention was to collect data from undergraduates in order to assess how seniors had changed since their freshman year, as well as what students learned from OOC experiences. In order to assure diverse opinions, senior students from 12 universities with OOC development opportunities were interviewed regarding their experience at their universities. All of the 149 student interviews were evaluated individually by research assistants and then compiled for review by the author. Kuh (1993) divided student responses into five main categories, including practical competence (a combination of self-awareness, autonomy and confidence) and cognitive complexity (the ability to apply reason and theory to other areas of life). Three other categories that Kuh listed as response categories were knowledge and skill (obtained in or outside of the classroom), personal competence (the ability to be self-sufficient and responsible), and altruism and estheticism (empathizing and working well with others). The two most frequently mentioned categories by students were practical competence and personal competence.

In the discussion section, Kuh (1993) explained the significance of OOC experiences on the categories of personal and practical competence, which included responsibility, autonomy and self-awareness traits. However, he emphasized that the students’ awareness of the topic before the study took place could have led them toward responding with personal-developmental traits and away from responding with categories such as knowledge and skill acquisition. According to Kuh, one distinguishing factor of reviewing students’ interviews about OOC development was that some suggested “the boundaries between learning in and out of the classroom…were blurred so as to be indistinguishable to students” (p. 298).

The main discrepancy in results emerged as a consequence of assessing responses from small liberal arts schools versus the larger universities. Students from small, mission driven universities were more likely to report development in cognitive complexity, knowledge and academic skills, and altruism and estheticism, because those students had been engaged by a higher obligation to engage in the community activities, such as study groups, dorm events and professor interactions. Although students are shaped by the knowledge gained in the classroom, Kuh argued that “life outside the classroom provided ample opportunities to test the value and worth of these ideas and skills”(p. 301).

The reviewed literature consistently suggests that faculty interaction is crucial for student involvement, and development (both personal and academic). Cotton and Wilson (2006) also argued that although faculty members have an opportunity to influence, there is some hindrance to student communication that needs to be remedied. Chickering and Gamson (1987) worked out seven principles that should be followed for good undergraduate education, five of which are aimed toward faculty involvement. Lastly, both Kuh (1993) and McKinney, et al. (1998) expressed that, for most students, the process of learning co-exists inside and outside of the classroom.
METHOD

Interview

A graduate from Oklahoma Baptist University (OBU class of 2007) was interviewed on October 12, 2011. The interviewer will be referred to as John Smith. He served as a residential assistant at one of the OBU male dorms, then as residential director, and went on to graduate with a Master of Education in Adult and Higher Education from Oklahoma University (OU). Smith was chosen to be a part of this study because there were few other people who had a background both at OBU and in student affairs; moreover, the alumnus had left OBU several years previous to the interview, giving him time to reflect on his development as an undergraduate. He was asked questions about his personal experience with professors. He spoke on topics such as professors’ attributes that made student-professor relationships successful, the initiation of out-of-class (OOC) communication, and the extent to which he felt professors personally invested in his life.

Focus Group

A focus group discussion was utilized in order to gain a better understanding of OBU students’ experiences. An email was sent to members of four campus organizations: Campus Activities Board, Student Government, Steering Committee, and the Success Center Leadership team. Representatives from these organizations were targeted because they have built in opportunities to interact with the student body. The organizations were chosen either because they have the largest student membership or involve the most campus participation. The first person from each of the six colleges (Theology and Ministry, Business, Nursing, Humanities and Social Sciences, Fine Arts, and Science and Mathematics) to respond to the email was invited to serve as a focus group participant. A range of classifications were represented, including a sophomore, junior, and four seniors. Each participant is labeled in the following data section (A through F) according to the order in which they entered the discussion. The subjects discussed included important aspects of student’s college experience, professor attributes, and the life influence of professors.

Student Survey

A survey was created to assess the quantitative aspects of student-faculty interaction. The OBU student body received an email inviting them to participate in the survey and explaining the topic with a link to the QuestionPro website. The participants had two weeks to complete the survey. Every person with an OBU student account, including the 69 members of the OBU graduate school, received the invitation. Each member of the population had an equal opportunity to participate in the study. Questions ranged from the amount of professor interaction to the level of comfort when discussing personal issues with professors. There were also two open-ended questions, soliciting a descriptive word or phrase regarding the topics of discussion when OCC occurred with faculty members. The first two questions regarding “classification” and “college of study” were analyzed by Goodness-of-Fit to ensure that the percentage of survey respondents by class and college were similar to the actual population of OBU. Questions 3 through 8 were assessed with proportion hypothesis testing in order to find if the claims were founded by the data. Questions 9 and 10 were open-ended.

DATA

Part One: Interview

J. Smith was an Oklahoma Baptist University (OBU) alumnus (2007), OBU men’s residential director, and received a Master’s degree in Education. After a few introductory words about the topic of student-faculty interaction, he was asked if there were any professors that he had found particularly engaging during his time at OBU. Smith mentioned some of the professors in his department (religion) that were particularly engaging and, specifically, his advisor. When asked how he became aware of the interpersonal connection with his advisor, Smith explained that whether professors were intentional in the classroom or sought him out informally, he felt comfortable because the faculty made themselves approachable. Smith summarized the attributes of the professors he discussed:

One of the main things is that they listened. They were able to help me think my opinion was valid. Whether
it was right or wrong wasn’t the issue; it was about knowing it was worth listening to. For someone who was in their position of power or privilege to acknowledge me and to be willing to listen… was an attribute that all of them showed. (personal communication, October 12, 2011)

Smith argued that the professors he was closest to were good at communicating, and giving feedback both formally and informally. The indication of which professors were safe to engage with was their willingness to dialogue openly. After Smith explained the lengths that his professors went to in order to connect, he was asked, “At what point, and to what extent did you feel comfortable initiating conversation?” He responded that initially he would only bring up course material with a professor. However, as time went on, Smith explained, friendships were developed through dialogue in class, after which joking with professors felt more comfortable and stopping for casual conversation was easy. “It started with task oriented things revolved around coursework” (J. Smith, personal communication, October 12, 2011).

Smith spent some time describing his college timeline. After a year and a half at OBU, he took three years off before returning to finish his degree. During his junior year, he began more consistently engaging his professors.

The next question asked was, “To what extent did those professors invest in you personally, course work aside, just in your life?” Smith noted that his advisor would ask him to babysit on occasions, which Smith said “communicated volumes; he trusted me” (personal communication, October 12, 2011). Smith continued by illustrating a scenario wherein he was struggling through a question about some personal beliefs and went to his advisor, who would invite him in, put down whatever he was grading, and talk openly. Smith emphasized that those types of experiences inspired him personally. Another example of professor investment outside of class was his experience with a younger professor who was involved in recreational sports:

We were on the same intramural basketball team, and so there was personal engagement there. The fact that he would come over to say, “John, when you post up you need to pivot on your left foot not your right.” And even though it was about basketball things, it showed that he knew who I was, which communicated volumes. (J. Smith, personal communication, October 12, 2011)

Smith described the impact of academic and personal communication on his level of trust with faculty members. With that in mind, he was asked to assess those communication acts in regard to his college experience on the whole. Smith summarized the question in one statement: “The interaction I had with them was the make-or-break element to whether I would succeed in college” (personal communication, October 12, 2011). The confidence gained from the support structures of the professors around Smith gave him the ability to persevere through his undergraduate work.

After his undergraduate experience, Smith came back to OBU as a Resident Director (RD) of the prominent male dormitory on campus. Because of his history at OBU, he was asked if he found his experience with professors to be typical of OBU students. He explained that there are many students who could say that their experience paralleled his. Smith used “common” as a word that could describe the likelihood of students feeling a personal connection to their professors. However, he qualified his statement by revealing that though his experience was not unique, many students go through their years at OBU without a connection to faculty members on a personal level.

Lastly, Smith was asked, “What is the most beneficial feature/element that can be gained from professor interaction?” Smith responded by referring to the research of G. Kuh, who spoke at a conference Smith attended, and argued that students with higher faculty interaction are more likely to learn, stay at that university, and have positive overall college experiences. Further, Smith summarized Kuh’s recent research by stating, “Students being around their professors help retention, success, learning, and overall positive experience” (personal communication, October 12, 2011). Moreover, Smith noted that communication between students and professors naturally starts in the classroom, which can “put a lot of weight on the professor to have a learning environment that is inviting, welcoming and lets the student know that they are approachable” (personal communication, October 12, 2011).

Part Two: Focus Group

The six students who participated in the focus group included one member of each college at Oklahoma Baptist University (OBU), and each person was involved in on-campus activities. The first area of the undergraduate experience
that the participants characterized was the most exciting or memorable aspect of their time at college thus far.

Participant A argued that describing one area as the most memorable was difficult, because peer friendships are very important; acquiring education and the ability to think clearly are also critical. She went on to say, “I have relationships with faculty members that have been so influential I can’t even begin to describe” (personal communication, November 9, 2011).

Although participant A said her comment could be cliché, participant B noted, “finding out who you are” is a major factor in the college experience. “Now is really the time you find out about yourself relationally, individually, and spiritually” (personal communication, November 9, 2011).

Participant C referred back to the idea of participant A that there are many aspects to the change of an individual during his/her time in school, including “the relationships you have with your peers and professors and the things you’re learning in class. All of those have contributed to the shaping and modeling of me finding out who I am” (personal communication, November 9, 2011).

The last response came from participant D, who traveled 14 hours from home to attend OBU. He noted, “being away from home, on your own… you learn a lot [about yourself]” (personal communication, November 9, 2011). The independence that came from participant D living on his own gave him an avenue for the self-realization that the group had discussed earlier.

A summary of the participants’ depiction of the most important student experience or memory was of a time when students can find their strengths, find themselves, and gain self-awareness. Participant A clarified that a more clear depiction of student experience is a time of understanding yourself. She stated, “Coming to an understanding of who you are, what you like to do, what’s important to you” is really the foundation of what college students leave school having attained (personal communication, November 9, 2011). The group determined some avenues that students use to understand themselves: the classroom subject matter, relationships with peers and faculty, and being away from home.

A foundation of what students find central to their period in college was established and the conversation proceeded to discuss some specific OBU experiences with professors. Each member of the group mentioned a few professors with whom they felt a connection: some were advisors and some did not even teach in the student’s field of study. Participant E mentioned three separate professors that were not involved in her college, but she felt they were very influential. Once each participant had identified the professors with whom they felt engaged, they were asked to describe the attributes the professors possessed that made them so engaging.

Participant B pointed out that her professors wanted her to succeed in their classes, but more than that, they were concerned for her personally. Participant C agreed by illustrating her first semester experience with a professor with whom she now has a close relationship.

I had a pretty rough transition [into college]; a lot of things happened outside of school. I went to [her professor’s] office to talk about assignments and she would ask ‘Are you okay?’ and I told her I was fine, then she said, ‘No really, are you okay?’ and I ended up crying in her office. She had a willingness to talk about me, not just my assignments, and willingness to talk about what was on my mind. (personal communication, November 9, 2011)

Participant E indicated that her freshman English professor had a strong desire to promote students’ growth. During the time spent in her professor’s office, the topics were typically life situations. The English professor did not have participant E in any other classes, but would ask about her life when they saw each other on campus and once even invited her to go to coffee. As participant E noted, “She poured into me and encouraged me and just really wanted to see the evolution of my person” (personal communication, November 9, 2011).

Responding similarly, participant A recalled her freshman religion class, where she sat in the back and never spoke a word, but even after she was out of the class, when she saw that professor, he would say hello and could call her by name. Participant A revealed feeling that “This man knows me and he cares about me” (personal communication, November 9, 2011). Participant D mentioned feeling astonished when he saw professors out-of-class (OOC) freshman
year because they would engage with him in conversations about more than classroom subject matters.

The group was questioned about the experiences OOC with professors, as participant D mentioned, and what type of conversations, if any, occurred. The group established that professor sightings were frequent and, more likely than not, there was some type of interaction. Participant F referenced a time when she saw a professor in Wal-Mart that she had never had in class, but he had seen her on campus and stopped to talk for about ten minutes. Participant B stated that a professor she saw at church introduced his wife to her and now the wife will ask participant B how school and life are going.

A friend of participant C was close to a professor’s entire family, and when the student was having some life trouble, the professor’s wife took her out for coffee to discuss the issues. The group argued that although it is rare to not exchange some type of interaction with professors, even in passing, students involved in the larger (town) community are more likely to know faculty members. Whether experiences were similar to participant D’s, in that there had been few serious conversations, or more parallel to participant E’s, in which her professor was offering relationship advice, all members had ample contact OOC with faculty members.

In order to pursue more information about the interaction between students and professors, the participants were asked which party (student or professor) initiated OOC communication. Participants B and D voiced the need for mutual expressed interest in conversation. Participant B stated, “It might start with a smile, or then a hello” and then the conversation has room to develop. Then participant B explained that after a few conversations or “chats,” the comfort level in the relationship increases. Participant A recounted a time with her advisor when she cried in his office for the first time. That vulnerability shown by the student communicated that she trusted him, which opened more communication opportunities. That was not the experience of participant F, however, when she cried in front of her science professors. The humanities majors (i.e. English, Art, Biblical Languages) confessed their belief that the people who are involved in those disciplines might be more prone to more emotional dialogue.

In a review of the data, it may be noted that although the science majors had encountered similar experiences with professors as the other participants, the closeness of their relationships seemed slightly different. The humanities students entered into friendships with their professors, while the science students typically had more professional relationships. The next question, “What type of information is shared when you talk with professors?” was directed to participants E and F, who represented science majors in an effort to flesh out the differences between the student experiences.

Participant F conveyed that many times she was distressed about future schooling and even cried in her professor’s office about the notion of applying for graduate schools; however, her teacher did not console her, but pointed out the areas in which she had to improve. Participant E pointed to a difference in interest, because her professors had academic success in mind, and she is more relational: “There were just conflicting personalities” (personal communication, November 9, 2011). She then added that her professors had very high expectations and wanted the students to be focused on schoolwork, but the secretary of the college, who was more relational, was there for students who were about to panic.

As a follow-up to participants E and F’s experiences, they were asked, “Who initiates the conversations you have with your professors outside of class?” Typically the students initiated the OOC communication, and participant F mentioned that interactions were awkward and the subject matter was usually science-based. On the other hand, participant A was invited along with other philosophy students to a professor’s house to eat, where discussion was about personal life. Participant C also had an invitation from a professor to come by his office anytime for tea and conversation. Participant D stated that his relationships with the business professors were somewhere between the experiences of the artistic disciplines and the sciences. He explained, “I’m close enough to most of the business professors that [interaction] isn’t just “hi” anymore. We’ll stop and have a conversation, but it’s mostly about random [topics]” (personal communication, November 9, 2011). He mentioned that through taking classes from different professors, he was able to gain familiarity with them and it became “more comfortable talking about stuff, when you know each other and know a subject that you have in common” (personal communication, November 9, 2011).

Once the discussion about the group’s interactions with their professors concluded, they were asked to expound on some of the areas of life, if any, in which their professors had been influential. A category in which participant C’s profes-
sor had major influence on her was faith. The classes she took helped her understand, more clearly, the aspects and struggles of her faith: “I don’t think that’s an experience unique to me at all” (personal communication, November 9, 2011). She would talk to an English professor about her class work, which led to discussion about faith. Discussion ranged from “Faith and her own struggles of faith at different times to my struggles and questions” (personal communication, November 9, 2011). They were able to have “solid conversations” that encouraged participant C and strengthened her faith.

Participant B observed that conversations where professors shared their life experiences opened the door for the relationship to mature and the connection became more relevant. As participant D stated,

[Professors] are influential in academics, too; having a relationship with them makes me want to work a little harder. You know them and, part of it is just me wanting to be liked; and it wouldn’t be the same if you didn’t have a relationship. (personal communication, November 9, 2011)

Participant A agreed, recounting when her professor told her, “You shouldn’t be making B’s on my tests,” which made her work even harder to accomplish the standard upon which her professor insisted. She admitted, “It’s true, I wanted him to like me because I was smart,” which echoed the explanation given by participant D.

Again, participant F had a different experience in her field of study. She explained the way her professors helped motivate students:

I think in [the science] department you have to impress them, because it’s so much dependent on what you’re doing after college. We all have that expectation with any professor we have. It’s not necessarily the professor that instills the desire to succeed, but at the same time [the professors] know how to [drive us]. (personal communication, November 9, 2011)

Participant E qualified the explanation by sharing that the faculty members set a standard and the students are called to meet it, but if they do reach the standard, faculty members take special note of their hard work. She clarified that others might relate a different experience. However, “I have a hard time connecting with science professors, because their personalities are so different. We are so dependent on what we do after school that [science related topics] take up a lot of [discussion] time” (personal communication, November 9, 2011).

After discussing typical interpersonal discussions the group of students had with their professors, they were invited to respond regarding the most significant gain from student-professor interactions.

Participant A articulated that faculty members were her examples for life. She saw characteristics in her professors that were appealing and looked to them so she could “become the kind of person [she] wanted to be” (personal communication, November 9, 2011). Participant E continued with a similar thought, that faculty members were once students and can relate to her situation, which provided her with hope for life beyond school. However, as participant B noted, there is a realm of diversity between students and professors, which gave her varying viewpoints of academics, faith, and other areas of life that would never have arisen without differing opinions.

When the group considered all their extra-curricular activities, academic work, dorm-life, and peer relationships, they ranked the relationships with faculty members as some of the most influential experiences of college. Participants A, B and C stated that the professor relationships were as important to their time at OBU as the peer relationships that they have developed. Participant A summarized by saying, “Relationships are going to be something that are much more influential than activities. They last longer than an intramural championship or a really good textbook” (personal communication, November 9, 2011). Participant E specified that because OBU has provided a community of learning and living, peer and professor relationships became molded together into learning about each other’s beliefs and thoughts. Again, participant A summarized, “The idea of community is right because it’s not this hierarchy of faculty and staff then students. We’re all people here, learning from each other” (personal communication, Novem-
Although participant F discussed not having very strong relationships with her professors, she did feel that her professors had influenced her thought processes and motivated and prepared her to take the next step toward veterinary school. Participant D believed that the relationships with his athletic teammates had shaped him most significantly. However, he expressed, “When I think about it hard, they become even more important; when I realize what I’ve learned in class and just how all these different ideas make me think about the world” (personal communication, November 9, 2011).

When participant A thought about staff members she asserted, 

People on the staff have invested in me and I’ve learned so much about myself and about life just sitting in their offices and listening to them talk. [Some of the staff members] invest on a very wide potion of the student body… and [they’re] not even one of the professors. (personal communication, November 9, 2011)

Overall, the four group participants indicated that faculty interaction was easily achieved and had the potential to develop quickly; some professors even sought out their students to follow up on personal issues that were encountered in conversation. Lastly, the participants observed that student-professor relationships were some of the most influential experiences they have had in their college life thus far.

Part Three: Survey

The student body of Oklahoma Baptist University (OBU) received a survey with questions pertaining to student-faculty interaction with a total of ten questions. The first two questions were assessed using a goodness-of-fit test to determine if those who responded matched the general OBU student population. The classifications of respondents generally reflects an accurate sample of the OBU population; the goodness-of-fit test (Table A1) failed to reject the null hypothesis of what we observed, matching what we expected with a 95% confidence. The second test (Table A2), however, did reject the null hypothesis with a 95% confidence; therefore, the number of respondents from each college is not necessarily an accurate representation of OBU’s student population.

The last eight questions were analyzed with hypothesis testing of a sample with one proportion with a 95% confidence level. Out of 250 respondents, 169 answered that on most occasions they interact with their professors when the OOC opportunity arises. More than 62% of students at OBU communicate with faculty members on most OOC occasions (Table A3). Further, the data indicated that when students and faculty members see each other out of the classroom, it is as likely for a professor to engage a student as it is for the student to be the initiator of interaction (Table A4). Most of the students at OBU (more than 80%) were comfortable or very comfortable interacting with their professors and more than 30% were very comfortable when communicating with faculty members, with 95% confidence (Table A5).

When asked “How likely are you to discuss personal struggles with a professor?” students were more neutral in general than previous questions. Thirty-three percent answered “sometimes,” while 37% replied “rarely.” Only 3% “always” went to their professors for assistance with personal struggles and 11.5% never went to faculty members with personal issues (Table A6). The hypothesis test failed to reject the null hypothesis so no significant conclusion could be drawn.

The students were asked to consider one of their specific professors and rate their level of agreement with the statement, “My professor has been very influential to my OBU experience.” More than 87% of students agreed with the statement in some respect and more than 69% of OBU students “agree” with the statement with 95% confidence (Table A7).

Again, the survey asked students to rate their level of agreement/disagreement with the statement “I go out of my way to engage in conversation with a professor outside the classroom.” About 50% of the responses were in some form of agreement; however, with 95% confidence more than 50% of students hold to one of the three neutral categories (somewhat agree, neutral, and somewhat disagree) (Table A8).

Questions 9 and 10 were open-ended questions that have been assessed quantitatively. The participants indicated a word or phrase, which described their interaction with professors, and those responses were evaluated by comparing
positive, voluntary communicative statements to negative communicative statements. More than 69% of students at OBU would indicate positive interactions with their professors (Table A9). One student stated that “[professors] recognize and appreciate me for the individual that I am and they are always helpful and responsive to my needs and curiosities.” Another student recognized that “[communication] changes outside of my department because they are ‘one time only professors’ and I have no interaction with them outside of that one semester.” Although both students had positive comments about student-professor communication, the latter student emphasized that it does not include professors whose classes are not taken habitually.

Participants were asked to indicate the types of topics that emerge in OOC discussion with professors. The responses were evaluated by comparing academically related and non-academically related topics. Of 190 responses, almost 100 noted that both school and personal topics emerge in conversation. More than 60% of students discuss non-school related topics (either personal or current events) with their professors outside of the classroom (Table A10) and most students included some type of academic topic.

**DISCUSSION**

Throughout the literature review, conversation with J. Smith, the focus group, and the survey, it became evident that students at Oklahoma Baptist University (OBU) benefit from a learning environment in which professors are intentionally approachable outside the classroom. It stands to reason that the same would hold true for similar universities that focus on fostering an environment of communal learning. The following outcomes developed: 1) Out-of-class (OOC) interaction between faculty and students enhance academic motivation, professional success, and personal character; 2) OOC communication serves to generate relationships that are ultimately more fully developed and more influential; and 3) OOC interaction strengthens appreciation for and loyalty to the university.

The most important college experiences mentioned in the focus group were comprised of relationships (with peers and professors) and learning (academic material and self-awareness). Ultimately, students develop both academically and affectively through professor interaction. J. Smith, the focus group participants, and the literature all suggested that students who have a strong tie to a professor also have a stronger desire to achieve academic success. In addition, the connections to professors help students affectively identify with the learning environment in all aspects: socially, professionally and personally. Though results clarifying that academic and affective learning are not discrete categories in practice, they represent two significant areas of potential influence that supplement the undergraduate experience. Students who fully develop in both affective and academic areas will leave the university as more qualified candidates for employment and will have stronger ties to the university as alumni.

More than 79% of students (p=.05) discussed academic matters with their professors OOC, which creates an environment in which students can consider their school work more often (Table A10). If professors give cues in class that they are open to OOC communication, the students that do come will feel comfortable discussing school-related issues. J. Smith indicated that his relationships with faculty members started in classes and then developed as he took more of those professors’ classes. Likewise, focus group participants claimed that interaction with professors began with simple communication acts, and then developed with quantity and quality interaction. More than 79% of OBU students feel comfortable interacting with their professors; however, if faculty members are having trouble encouraging those students who would not normally engage in class or in academic learning OOC, professors should continually promote OOC connections. Administrators should be on the front lines encouraging faculty members to facilitate more OOC interactions. For example, if faculty members are provided with biographical and historical data on individual students (pre-college), they would be more equipped to engage in a more personal way (Table A7).

Chickering and Gamson (1987) explained that the first principle that could improve higher education was promoting student-faculty contact, but they did not articulate specific reasons behind the principle. As participant D stated, “I know [my professors], and part of it is just me wanting to be liked, and it wouldn’t be the same if [I] didn’t have a relationship” (personal communication, November 9, 2011). This concept of a relationship driving students to succeed was common in both the interview and the focus group. Palmer (1998) argued that good faculty members integrate their students, subject, and passion; students can sense the passion of their teachers and some students try to mimic the enthusiasm. Cotton and Wilson (2006) also explained that once a student perceives an expectation from a faculty member, that individual would feel a need to maintain higher performance. If faculty members can create a relation-
ship, it is likely that students will be more self-motivated in understanding material. Moreover, participant F recalled that her professors were not as personal and affectionate as some of the other participants' professors; however, her professors communicated a drive for success and she continued to pursue excellence, in part because of her professors' zeal. Administrators should search for professors who have a passion for their subject and an eagerness to intentionally engage their students.

The degrees to which student-professor OOC relationships are intentional affect more than students' effort in academics, but also students' connection to the university and overall academic experience. According to Pascarella (1980), general student satisfaction with the university will increase as more OOC interaction between students and professors occurs. J. Smith mentioned that student-faculty relationships could assist retention at a university because of the support structures that students receive.

Professors teach students a great deal more than their subject matter. As Kuh (1993) argued, “The boundaries between learning in and out of the classroom... were blurred so as to be indistinguishable to students” (p. 298). The connections between academic learning and affective learning (social, personal and professional) are impossible to differentiate. As emphasized by the results from the survey and focus group, conversations about academics quickly lead to discussion about personal and social issues (Table A10).

Participants of the focus group shared the idea that one of the most important characteristics of college life was the molding and sharpening of students' characters. As they continued to discuss personal areas that changed, they were unknowingly exploring characteristics Kuh described about practical competence (a combination of self-awareness, autonomy and confidence). Although J. Smith would go into his advisor's office to evaluate academic material, he communicated that the results were validation, and confidence in his own ideas and intellectual merit. The support professors give students in searching for self-awareness and independence contributes to students' futures.

The reason Chickering and Gamson’s (1987) seven principles hold true in terms of improving higher education is because they were developed to “improve teaching and learning,” but subsequently advance affective learning for students (p. 1). More than 79% of OBU students indicated they feel comfortable interacting with their professors; more than 60% of OBU students discuss affective topics with their professors outside of class; more than 69% of students report positive experiences with the faculty; and more than 87% of students feel that their professors have been positively influential in their overall OBU experience. The survey data revealed a correlation between comfort level, positive experiences, affective topics, and professor influence. Administrators should be creatively and actively searching for ways to promote more student-faculty OOC opportunities because retention rates and student success have lasting implications for a university’s legacy.

**CONCLUSION**

Though much research has stressed the importance of student-faculty OOC contact, there has been minimal research explaining why and how it works to make one's university education more meaningful. More research on student-faculty OOC interactions could be a compelling factor in establishing a healthier academic institution. In universities similar to OBU, OOC communication should be discussed when recruiting students and faculty. Further, institution administrators should emphasize OOC communication at faculty meetings and highlight examples on university websites. At Oklahoma Baptist University (OBU), whether discussing favorite sports, poetry, or future graduate school, the more interaction students have with their professors, the more meaningful their experience. Ultimately, professors that are intentionally engaging will be likely to reach students on a deeper level than academic learning and can support social, emotional, and professional development. Although students often need a cue from professors in the classroom that they have the approval to interact outside the classroom, the charge still lies with administration to enlighten students that OOC interactions will be beneficial and provide professors with resources (training on advisement) and information (student background information) so the faculty have the means to be intentional. All parties involved, including students, faculty, and administrators, need to realize the potential benefits of such OOC interaction and, as McKinney, et al. (1998) argued, should assist in the provision of cooperation between academic and affective learning.

Finally, there is a question as to whether student-professor interaction may produce bias in the faculty member's
academic evaluation of the most interactive students. Additional research could embark on a study to assess the academic evaluation of heavy OOC contact students versus low OOC contact students. Further studies should assess student-professor OOC interaction at larger college campuses. The value of relationships has been proven to be substantial among universities with similar characteristics to OBU; hence, duplicating this type of research at larger institutions could be especially beneficial.

REFERENCES


Neal Ellis (Neal.ellis@okbu.edu) is a junior student-athlete and Applied Communication major at Oklahoma Baptist University. He presented “Implications of Out-of-Class Engagement” at the 2012 Oklahoma University Sooner Communication Conference, *Communication Connections: Traditional and Contemporary*. He has also been an Academic All-American for his cross-country team and is currently serving as Student Body President.
APPENDIX
OBU STUDENT SURVEY RESULTS BY QUESTION

Table A1
Respondents by Classification

<table>
<thead>
<tr>
<th>Class</th>
<th>Survey</th>
<th>Survey (whole#)</th>
<th>OBU enrollment</th>
<th>OBU (whole#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>24.0300%</td>
<td>24%</td>
<td>21.7691%</td>
<td>22%</td>
</tr>
<tr>
<td>Junior</td>
<td>23.2500%</td>
<td>23%</td>
<td>18.9461%</td>
<td>19%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>20.1600%</td>
<td>20%</td>
<td>20.4517%</td>
<td>20%</td>
</tr>
<tr>
<td>Freshman</td>
<td>32.5600%</td>
<td>33%</td>
<td>38.8331%</td>
<td>39%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0000%</td>
<td>100%</td>
<td>100.0000%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table A2
Respondents by College

<table>
<thead>
<tr>
<th>College</th>
<th>Survey</th>
<th>Survey (whole#)</th>
<th>OBU enrollment</th>
<th>OBU (whole#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>8.7500%</td>
<td>9%</td>
<td>10.5000%</td>
<td>10%</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>18.2500%</td>
<td>18%</td>
<td>12.1000%</td>
<td>12%</td>
</tr>
<tr>
<td>Humanities</td>
<td>28.5100%</td>
<td>29%</td>
<td>33.0000%</td>
<td>33%</td>
</tr>
<tr>
<td>Nursing</td>
<td>11.4100%</td>
<td>11%</td>
<td>12.9000%</td>
<td>13%</td>
</tr>
<tr>
<td>Science Math</td>
<td>17.4900%</td>
<td>18%</td>
<td>8.5000%</td>
<td>9%</td>
</tr>
<tr>
<td>Theology</td>
<td>10.2700%</td>
<td>10%</td>
<td>16.3000%</td>
<td>16%</td>
</tr>
<tr>
<td>Undecided</td>
<td>5.3200%</td>
<td>5%</td>
<td>6.7000%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0000%</td>
<td>100%</td>
<td>100.0000%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table A3
Regularity of Student-Professor Interaction

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every time</td>
<td>54</td>
<td>21.60%</td>
</tr>
<tr>
<td>Most often</td>
<td>115</td>
<td>46.00%</td>
</tr>
<tr>
<td>Some time</td>
<td>77</td>
<td>30.80%</td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
<td>1.60%</td>
</tr>
<tr>
<td>Totals</td>
<td>250</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Note. Students answered the question: How often is there interaction when you see professors outside of class?
### Table A4

**Initiator of Interaction**

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>107</td>
<td>42.97%</td>
</tr>
<tr>
<td>Professor</td>
<td>142</td>
<td>57.03%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>249</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

*Note.*) Students answered the question: Who is more likely to initiate interaction?

### Table A5

**Comfort Level of Students with Professors**

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Comfortable</td>
<td>90</td>
<td>36.59%</td>
</tr>
<tr>
<td>Comfortable</td>
<td>117</td>
<td>47.56%</td>
</tr>
<tr>
<td>Neutral</td>
<td>32</td>
<td>13.01%</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>6</td>
<td>2.44%</td>
</tr>
<tr>
<td>Very Uncomfortable</td>
<td>1</td>
<td>0.40%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>246</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

*Note.*) Students answered the question: How likely are you to discuss personal struggles with a professor?

### Table A6

**Likelihood of Students Discussing Struggles**

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>8</td>
<td>3.26%</td>
</tr>
<tr>
<td>Often</td>
<td>36</td>
<td>14.63%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>81</td>
<td>32.93%</td>
</tr>
<tr>
<td>Rarely</td>
<td>93</td>
<td>37.80%</td>
</tr>
<tr>
<td>Never</td>
<td>28</td>
<td>11.38%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>246</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

*Note.*) Students answered the question: How likely are you to discuss personal struggles with a professor?
Table A7  
_Influence of OBU Professors_

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally Agree</td>
<td>105</td>
<td>43.93%</td>
</tr>
<tr>
<td>Agree</td>
<td>72</td>
<td>30.13%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>40</td>
<td>16.74%</td>
</tr>
<tr>
<td>Neutral</td>
<td>12</td>
<td>5.02%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>4</td>
<td>1.67%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>1.67%</td>
</tr>
<tr>
<td>Totally Disagree</td>
<td>2</td>
<td>0.84%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>239</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Note.* Students were asked to consider one of their major professors and rate their level of agreement/disagreement with the statement, “My professor has been very influential to my OBU experience.”

Table A8  
_Unncessary Engagement with Professor_

<table>
<thead>
<tr>
<th>Answers</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally Agree</td>
<td>20</td>
<td>8.44%</td>
</tr>
<tr>
<td>Agree</td>
<td>46</td>
<td>19.40%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>56</td>
<td>23.63%</td>
</tr>
<tr>
<td>Neutral</td>
<td>55</td>
<td>23.21%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>31</td>
<td>13.08%</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>8.44%</td>
</tr>
<tr>
<td>Totally Disagree</td>
<td>9</td>
<td>3.80%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>237</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Note.* Students were asked to rate their level of agreement/disagreement with the statement, “I go out of my way to engage in conversation with a professor outside the classroom.”
### Table A9
*Description of Out-of-Class Interaction*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Statements</td>
<td>139</td>
<td>75.14%</td>
</tr>
<tr>
<td>Negative Statements</td>
<td>46</td>
<td>24.86%</td>
</tr>
<tr>
<td>Total</td>
<td>185</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Note.* Students answered an open-ended question asking to indicate a word or phrase that describes their interaction with their professors.

### Table A10
*Topics of Out-of-Class Conversation*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Related</td>
<td>64</td>
<td>33.68%</td>
</tr>
<tr>
<td>Non-academic Related</td>
<td>29</td>
<td>15.26%</td>
</tr>
<tr>
<td>Both</td>
<td>97</td>
<td>51.06%</td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Note.* Students answered an open-ended question asking what types of topics typically emerge when interacting with professors.
QUANTIFYING ONLINE LEARNING CONTACT HOURS

Karan Powell
Jennifer Stephens Helm
Melissa Layne
Phil Ice
American Public University System

Technological and pedagogical advances in distance education have accentuated the necessity for higher education to keep pace regarding institutional infrastructures. Each infrastructure—driven by a common mission to provide quality learning—interprets quality according to standards established by various governmental and accrediting entities. Staying ahead of the technological and pedagogical changes has been challenging for many public higher education institutions, which are continuing to struggle with online course design and delivery modes (Suttle, 2010). Online universities, however, have aggressively and strategically responded to technological and pedagogical shifts across institutional, departmental, program, and course levels according to their institutional mission, vision, and core values. The American Public University System (APUS), a leader in postsecondary online learning, continues to align these foundational components through systematic program and course assessment. Demonstrating commitment to quality, APUS leaders developed the APUS Online Contact Hours Calculator to assist faculty and program directors with the assessment of total course contact hours. Core learning management system tools used to complete in-class and homework projects were apportioned time requirements toward contact hour calculations, thus streamlining the course review process, adhering to governmental and accreditation standards, and ensuring the overall quality and rigor of each online course.

Keywords: online learning, contact hour calculation, online universities, model, assessment of learning, accreditation

INTRODUCTION

Online learning’s popular phrase “anytime, anywhere” could easily be the catch-phrase of the 21st century. As the number of online learners continues to increase (Allen & Seaman, 2010), the demand for quality “anytime, anywhere” learning has been of great importance to higher education institutions nationwide. Further, the Learning Management System (LMS) has been “the primary vehicle for delivering courses and where related scholarly communities have emerged over the last 15 years” (Ice & Burgess, 2012, p. 447); therefore, pedagogy and institutional policy has been developed against common tools and components of the LMS (i.e., discussion board, chat, resources, learning activities). Despite the prevalence of LMS-use in higher education as a platform to deliver online learning, those serving on institutional strategic planning committees would be well-informed to develop policies and guidelines which accommodate technological and pedagogical advances, especially as online learning platforms continue to develop and evolve with additional innovative components to assess student learning.

Conversely, the development and implementation of institutional policy has been sluggish regarding these technological and pedagogical shifts. Even more troubling is that for those institutions that are transforming their policies and guidelines, many are developing them against face-to-face standards of practice. With regard to curriculum, instruction, and assessment, distance education experts vehemently argue that comparing face-to-face learning to distance learning is analogous to comparing apples to oranges, and institutions should therefore resist the urge to draft policy around this notion (Freeman, 2010; Suttle, 2010).
Institutional Background

Originally founded in 1991 as American Military University (AMU), APUS’s main focus was to meet the educational needs of military personnel. Twenty-one years later, APUS has strategically positioned itself as a leader in quality distance education—serving the academic needs of all student populations and continuing to be the largest provider of higher education to the armed forces.

Through its member universities, American Military University and American Public University, APUS provides relevant and affordable distance learning to more than 100,000 working adults worldwide. More than 100 degree and certificate programs are offered in disciplines such as education, technology, business administration, liberal arts, national security, military studies, intelligence, homeland security, and criminal justice.

Institutional Mission, Vision, and Core Values

An institutional mission condenses and conveys its overall purpose and responsibility to its clientele. The mission of APUS is “to provide quality higher education with emphasis on educating the nation’s military and public service communities by offering respected, relevant, accessible and affordable, student-focused online programs, which prepare them for service and leadership in a diverse, global society” (APUS website, 2011). This mission serves as the foundation for all present and future institutional decision-making.

The APUS vision focuses on providing superior and relevant distance learning programs to its learners. Specifically, APUS strives to (a) create interactive, effective learning environments for all constituents; (b) serve its constituents’ diverse personal and professional development needs; and (c) expand access to affordable programs to underserved learners (APUS website, 2011).

Toward realizing its mission, APUS has further developed a set of shared principles and core values that include (a) learning; (b) quality; (c) integrity; (d) diversity; (e) freedom of inquiry and expression; (f) accountability; (g) access to underserved; (h) adaptive and responsive; (i) innovation; and (j) collaboration. Together, these principles and values ultimately prepare students for service and leadership in a diverse, global society (APUS website, 2011). The mission, vision, and core values are the essence of an institution and, as such, should inform all activities within the university. One branch of the higher educational institution, in particular, is receiving critical attention: technology and pedagogy.

Out with the Old, In with the New

Although there are many aspects to consider regarding the varied trajectories that technological and pedagogical change could take, the U.S. Department of Education’s adoption of new regulations regarding an institution’s eligibility to award academic credit put an end to ambiguity and lack of clarity regarding programmatic integrity. Specifically, the regulations set forth are two-fold: 1) a federal definition of the credit hour applicable to eligible institutions and 2) requirements for accrediting agencies, as a condition of their recognition, to review the institution’s policies and procedures for determining credit hours and the application of those policies and procedures in practice, using the federal definition.

Therefore, in response to these regulations, the authors wish to focus specifically on the number of hours a student is involved in course learning that is reasonable and that further complies with contact hour requirements. This initiative stemmed from a comprehensive, institution-wide course review process aimed toward systematically identifying the strengths and areas for enhancement or improvement for each course offered at this institution. While conducting the course reviews, the authors further identified the need for a contact hour calculator that considers (and is adaptive to) various online learning components and platforms. As a result, a model was developed to ensure adherence to the contact hour regulations and to ensure course quality and rigor.

REVIEW OF THE LITERATURE

Unfortunately, the literature is sparse regarding the emerging topic of contact hours in online learning courses. This paucity of knowledge was determined following an exhaustive literature search using the following databases: (a) Academic Search Complete; (b) EBSCOhost; (c) EBSCO eBook Collection; (d) ERIC; (e) IEEE Computer Society Digital
Library; (f) Dissertations and Theses; (g) Wilson OmniFile; and one search engine, Google Scholar. Various combinations of keywords and phrases synonymous with the overarching topic were entered into all of the databases and the search engine. These keywords and phrases included contact hours, seat time, academic credit hour, converting, model, framework, institutional assessment, institutional policy, institutional infrastructure, calculating, learning management systems, distance education, distance learning, online learning, and online courses. Of the 30 resulting resources, only 17 resources were determined to have a high level of rigor and relevance for inclusion.

**Institutional Strategic Planning**

In their 2011 report on distance online education, *Going the Distance: Online Education in the United States*, Allen and Seaman administered a survey to over 2,500 colleges and universities to gather information on the nature and extent of online education in the United States. One particular intent was to discover if online learning is part of each institution’s long-term strategic plan. The survey elicited the following results: (a) 65% stated that online learning was a critical part of their long-term strategy; (b) for-profit institutions comprised 69% of institutions who agreed that online learning is critical; (c) for-profit institutions are the most likely to have included online learning in their strategic plan.

Interestingly, although the results of the survey indicated an increase in the number of students taking at least one online course in 2010 (over one-half million), Figure 1 illustrates results from years 2006, 2007, 2009, 2010, and 2011, revealing that a significant gap exists between CEOs who recognized that online programs are strategically important in their campus strategic plan (two-thirds of respondents) and CEOs who actually included online programs in their campus strategic plan (less than one-half of respondents).

**Figure 1. Recognition of Strategic Importance of Online Programs**

![Figure 1](image)

These perceptions are critical for understanding the overall institutional infrastructure and the specific factors that contribute to these perceptions, factors which, according to McFarlane (2011), involve cost, image, quality, and value which ultimately inform institutional regulations and pedagogies. Figure 2 displays an adaptation to McFarlane’s original diagram on the perception gap between virtual and brick-and-mortar schools.
The bottom-line: overall success and competitiveness will be greatly determined by institutional leadership and how leadership views and responds to transformational change (Jones & George, 2009).

**Institutional Infrastructure**

The organizational or institutional structure, as framed by institutional leaders, is meant to serve as a guide for making decisions affecting pedagogy (McKenzie, 2003; Suttle, 2010). The framework from which institutional infrastructure is developed must reflect the mission, vision, and core values of the institution as a collective body. If it does not frame these foundational concepts, it is likely the infrastructure will result in a lack of motivation, quality, coordination, efficiency, and responsiveness to societal changes (Walonick, 2010). Ultimately, the deterioration of infrastructure will have negative effects on the quality of the product (Wheelen & Hunger, 2008), thus negatively impacting strategic planning and implementation (Olson, Slater, & Hult, 2004).

**Figure 2.** Perception Gap in Institutional Infrastructure and Pedagogy (adapted from McFarlane, 2011)
Changes in Tools? Pedagogy? Or Both?

Luckily, there are a number of institutional, pedagogical, and technological frameworks from which to fashion institutional infrastructure (Compton, Davis, & Correta, 2010). Drawing from pedagogical frameworks specifically aimed to support online learning, one of the most favored is the Community of Inquiry (CoI) Framework (Garrison, Anderson, & Archer, 2000). Comprising this framework are three constructs that are crucial to the overall online learning experience. These components include (1) Social Presence; (b) Cognitive Presence; and (c) Teaching Presence. Underlying each of these constructs are indicators or sub-categories that specifically define or describe which actions contribute to each construct. Figure 3 illustrates the underlying dynamics and interactions among all three presences.

Figure 3. Constructs Crucial to Online Learning Experience

The adaptability of the CoI Framework compared to various other learning architectures (Ice & Burgess, 2012) allows for transformative pedagogy—which is especially important as institutions begin to experiment and/or implement other learning platforms. When comparing online learning environments to brick and mortar institutions, it is clearly the technologies, or tools, that differ more than the pedagogical approaches. Despite the platform used for online learning, pedagogy will remain constant with regard to “mastery of content and curriculum, an appreciation of the various forms of standards, an awareness of assessment, and the ability to organize lessons that engage students in learning and knowing students well enough to make appropriate instructional decisions” (McFarlane, 2011, p. 33).
Contact Hour Calculations: Existing Models

Following the literature search, only one model has emerged to date that is specifically aimed toward supporting the Program Integrity regulations set forth by the U.S. Department of Education. The Implementation Model for the 2011 U.S. Department of Education Program Integrity Regulations (Simpson, 2011) serves as a guide for colleges that are preparing to implement the regulations and is based upon strategic planning at a Florida institution. The model outlines credit hour definition by (1) establishing procedures for monitoring regional accreditors’ policies and procedures and reporting to appropriate departments any changes in the accreditors’ policies; (2) developing policies and procedures to annually assess existing programs for compliance and communicate recommendations for curriculum modifications as warranted to the appropriate administrators; (3) establishing an evaluation policy and procedure; (4) establishing a communication protocol for alerting programs in need of modifications; and (5) establishing a tracking system to ensure that program modifications are implemented. Although helpful in terms of direction, this model lacks specificity and relevance to online learning as it currently operates in many institutions.

THE APUS ONLINE LEARNING CONTACT HOUR CALCULATOR: A NEW MODEL

The Purpose and Process

As previously mentioned, the development of the APUS Online Learning Contact Hour Calculator stemmed from an evaluation of all university courses for the purpose of ascertaining structural issues, compliance with university guidelines, level of rigor, instructor interaction, and other course issues. As such, the calculator was designed to benefit faculty and program directors in effectively and systematically assessing total course contact hours. As part of the review, APUS leaders began to investigate contact hours as part of the course evaluation plan. This investigation led to the refinement of APUS standards for contact which could be seen as equal to those established and espoused by other universities—whether online or on-ground.

This model includes many factors related to in-class and homework projects, as well as course reading requirements, toward attaining contact hour totals. As part of the APUS mission, the model will be revised and updated as more research in contact hour equivalents is conducted and specific course requirements are added.

The process for completing the course review requires the faculty member to

• complete an evaluation of each course in every program using academic guidelines and templates provided;
• provide a report and action plan for remediation and development of weak program courses;
• remediate all core and required classes coded as yellow and as many red classes as possible; and
• provide detailed plans for remediation and development of remaining classes by October 1, 2011. (APUS 2011)

A template was developed for evaluating adherence to best practices and has the essential components of a quality online course. The main components reviewed in this assessment included (a) syllabus; (b) course objectives and course materials; (c) interactivity; (d) technology; (e) assignments; (f) contact hours and student time; and (g) follow-up and next steps.

Defining Contact Hours/Homework Hours

APUS utilizes a variation on the traditional “Carnegie Unit” for measuring the amount of time our online students are engaged in learning. This can be expressed as an in-class function or a homework function. As is usual in Carnegie calculations of contact hours, one clock hour is equivalent to 50 minutes Carnegie contact units. In traditional “brick and mortar” higher education, contact hours can be viewed as the time that a student spends physically in the classroom, listening to a lecture, participating in discussion, taking an exam, or whatever is required for time in class. As an extension of this, students are advised they are to spend two to three hours studying per week for each hour spent in the classroom; this provides a basis for discussion on homework hours. Both in-class and homework time contribute
to the total number of contact hours for each course.

Contact/Homework Guidelines

APUS defines one unit of class credit as consisting of three hours of instructive learning per week for a 16-week class or six hours of instructive learning per week for an 8-week class. For the typical three credit class, it is expected that a student will be engaged in classroom learning experiences of 150 minutes x 16 weeks = 2400 minutes or the equivalent of 45 contact hours using the Carnegie unit of measurement. This means the student should spend these hours within their classroom participating in discussion boards, taking examinations, looking at PowerPoint slides, reading information from linked web sites, reviewing instructor lectures or any other items that engage the student within the APUS classroom.

Homework hours at APUS should equate to approximately two hours per every singular in-class contact hour for any given course. Items that fulfill the homework hours at APUS are reading the course text, completing formal writing/research assignments, answering questions on text readings, conducting research, studying for examinations, and other out-of-classroom course requirements.

As indicated in Table 1, APUS also further established reading expectations for each academic classification level of study. These expectations are included in the contact hour calculation spreadsheet.

Table 1
APUS Reading Expectations by Academic Classification

<table>
<thead>
<tr>
<th>Classification Level</th>
<th>Reading Expectation Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Level Undergraduate</td>
<td>400-600 pages or equivalent in online pages</td>
</tr>
<tr>
<td>Upper Level Undergraduate</td>
<td>600-800 pages or equivalent in online pages</td>
</tr>
<tr>
<td>Graduate</td>
<td>800-1000 pages or equivalent in online pages</td>
</tr>
</tbody>
</table>

Other factors included in the spreadsheet include number of discussion boards and requirements for posting; number of tests, including midterms and finals; other research and written papers; projects; level of class; study time for tests and exams; research time for projects; and other items typically found in our classes. Quantitative measurements of time were apportioned to each factor based upon pre-determined assumptions. These assumptions and measurements are outlined in Table 2.

At both the undergraduate and graduate levels of study, there are minimum requirements and basic expectations at APUS regarding contact hours. The three different levels of study, based on course number, are outlined in Table 3 with their suggested minimum total contact hours.

Using the APUS Online Contact Hours Calculator: A Sample Review

Meeting and exceeding minimal contact hour standards set forth by the Carnegie Foundation is one means to demonstrate a commitment toward meeting established standards for student contact and student learning.

From an initial pilot study using the APUS Online Contact Hour Calculator, the authors of the current study concluded that seven weeks of discussion boards with a final examination and formal research paper submission will typically cover the minimum in-class contact hours. However, if a discussion board seems more like an assignment than an engaging activity, the student may not be suitably engaged in the course. Additionally, the amount of time it takes to prepare for an exam, a discussion board posting, or to research a paper should bring a course within the expected range for total contact hours. Table 4 shows the course information requirements common to all contact hour course calculations.
<table>
<thead>
<tr>
<th>Homework Time Factors</th>
<th>Quantitative Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition speed for discussion board postings</td>
<td>25 words written per minute</td>
</tr>
<tr>
<td>Time provided for composing discussion board posting</td>
<td>20 minutes allotted per discussion board</td>
</tr>
<tr>
<td>Reading peers’ discussion board postings</td>
<td>180 words per minute (the assumption is made that students read all of their peers’ postings for the duration of the course)</td>
</tr>
<tr>
<td>Reading instructor’s feedback</td>
<td>10 minutes allotted per graded assignment for the student to review instructor feedback</td>
</tr>
<tr>
<td>Quizzes</td>
<td>60 minutes allotted for taking a quiz, and 60 minutes of preparation time</td>
</tr>
<tr>
<td>Weekly lecture notes:</td>
<td>50 minutes allotted per issuance of weekly lecture notes (ex. eight week course = eight weekly lecture notes; sixteen week = sixteen weekly lecture notes)</td>
</tr>
<tr>
<td>Links to external websites</td>
<td>20 minutes per external URL</td>
</tr>
<tr>
<td>Midterm examination</td>
<td>10 hours are allotted for taking the examination</td>
</tr>
<tr>
<td></td>
<td>10 hours for studying/preparation</td>
</tr>
<tr>
<td>Final examination</td>
<td>3 hours are allotted for taking the examination</td>
</tr>
<tr>
<td></td>
<td>10 hours for studying/preparation or (20 hours for studying/preparation when a midterm exam is not administered)</td>
</tr>
<tr>
<td>General reading assumption</td>
<td>250 words per double-spaced, typed page</td>
</tr>
<tr>
<td>Reading course materials</td>
<td>200 words read per minute or 180 words read per minute for electronic materials</td>
</tr>
<tr>
<td>Upper level undergraduate courses:</td>
<td>8 hours granted to students taking this level of study</td>
</tr>
<tr>
<td>Miscellaneous assignments</td>
<td>120 minutes granted per miscellaneous assignment</td>
</tr>
<tr>
<td>Composing a formal writing assignment</td>
<td>120 minutes granted for preparation time</td>
</tr>
<tr>
<td></td>
<td>20 words written per minute</td>
</tr>
<tr>
<td></td>
<td>30 minutes granted for each page of writing</td>
</tr>
<tr>
<td>Conducting research for a formal writing assignment</td>
<td>120 minutes granted per page of writing</td>
</tr>
</tbody>
</table>
Table 3  
**APUS Contact Hour Requirements by Academic Classification**

<table>
<thead>
<tr>
<th>Academic Classification</th>
<th>Level of Study</th>
<th>Academic Hour Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Level Undergraduate</td>
<td>100-200 Level</td>
<td>120 Combined Homework and Contact hours</td>
</tr>
<tr>
<td>Upper Level Undergraduate</td>
<td>300-400 Level</td>
<td>130 Combined Homework and Contact hours</td>
</tr>
<tr>
<td>Graduate</td>
<td>500+</td>
<td>150 Combined Homework and Contact hours</td>
</tr>
</tbody>
</table>

Table 4  
**APUS Course Information Example**

<table>
<thead>
<tr>
<th>Course Information</th>
<th>Calculated Contact Hours</th>
<th>Course Material Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title: PBHE528</td>
<td>Total Contact Hours: 145.46</td>
<td># of Pages Read: 200</td>
</tr>
<tr>
<td>Length of Course (in weeks): 16</td>
<td>Class Level: Graduate</td>
<td># of Words: 50,000</td>
</tr>
</tbody>
</table>

Table 5 shows an example of the first section of the spreadsheet containing the specific requirements for In-classroom contact hours, including (1) the number of hours; (2) the Carnegie contact hours; and (3) an explanation aiding the faculty member in determining the appropriate information to calculate.

The second section of the spreadsheet (Table 6) is the contact hour calculation spreadsheet for Homework Time. As previously mentioned, contact hours for Homework Time are based upon several factors including: (1) length of course; (2) number of discussion boards; (3) number of words for initial posting; (4) number of words required for responses; (5) minimum number of responses; (6) reading of instructor’s feedback; (7) quizzes; (8) lecture notes; (9) links to external websites; (10) midterm exam; and (11) final exam. Displayed in Table 6 are example contact hour calculation summaries of the assignments and course information including the final determination if contact hour requirements were met.

Judgments regarding each course are standardized and these standards further serve as criteria for new course development. If enhancements or deficiencies are identified in the course review process, the faculty member is designated to make the agreed upon changes within a specific time frame, and the course(s) is reviewed in a subsequent review process to ensure it conforms to the APUS academic quality standards.

**Implications**

Alignment of institutional missions, visions, and core values to infrastructure, technological, and pedagogical frameworks—all according to regulatory changes—can be a daunting task; however, careful consideration and alignment at all levels must be made to ensure a high level of quality in online courses.

Roschelle, Pea, Hoadley, Gordin, and Means (2000) reiterate the rationale that is analogous to the importance of alignment by stating that “One of the biggest barriers to introducing effective technology applications in classrooms is the mismatch between the contents of assessments and the kinds of higher-order learning supported most effectively by technology” (p. 91).

Although there are many aspects to consider regarding the varied trajectories that technological and pedagogical change could take, the U.S. Department of Education’s (2010) adoption of new regulations regarding an institution’s eligibility to award academic credit put an end to ambiguity regarding programmatic integrity. Specifically,
the regulations set forth are two-fold: 1) a federal definition of the credit hour applicable to eligible institutions and 2) requirements for accrediting agencies, as a condition of their recognition, to review the institution’s policies and procedures for determining credit hours and the application of those policies and procedures in practice, using the federal definition.

While the contract hour calculator was developed to quantify the interactions that comprise the online learning experience, it paradoxically has the potential to move learning away from the process-oriented paradigm. Specifically, there have been numerous calls to place more emphasis on measures of mastery than on time on task. However, federal regulators have been reluctant to embrace this concept, as mastery remains an ill-defined concept prone to manipulation by unscrupulous entities. Here, the contract hour calculator has the potential to establish a baseline of interaction against which normative measures of acquired proficiency could be correlated. In other words, once an institution has ensured that an adequate activity base has been established, they would then be free to concentrate on assessing students’ acquisition of knowledge. Thus, in a rather ironic fashion, thorough mapping of courses, vis-à-vis the contact hour calculator, has the potential to facilitate the emergence of more constructivist means of assessing learning.

SUMMARY

Within the context of higher education as a whole, Allen and Seaman (2011) posit that student enrollment in online courses currently exceeds 6 million—indicating that nearly one-third of all students in higher education have taken at least one online course in the most recent year. Also reported was that online enrollments have shown signs of slowing, but the growth of online enrollments continues to exceed the growth rate for enrollments of the entire higher education population. With these burgeoning numbers of students taking online courses, and in response to the previously mentioned governmental regulations, higher educational administrators would be well advised to re-examine and re-evaluate how contact hours are assessed and calculated in online programs. The authors of this study found no evidence in the literature of a contact hour model or technique to calculate contact hours in a distance education course; therefore, the development of the APUS Online Contact Hours Calculator will undoubtedly aid administrators toward providing some form of direction toward establishing guidelines in this regard.
Table 5
APUS In-Classroom Contact Time Calculation Spreadsheet Example – Part I

<table>
<thead>
<tr>
<th>Course Information</th>
<th>Calculated Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Course: CMRJ205</td>
<td>Total Contact Hours: 141.28</td>
</tr>
<tr>
<td>*Length of course in weeks: 8</td>
<td>Class Level: Lower Level Undergraduate</td>
</tr>
</tbody>
</table>

Complete the Starred Areas (*)

| Difference for Contact Hours: 21.28 |  |
|-------------------------------------|  |
| In-Classroom Time                   |  |
| *Number of Students: 14             |  |

<table>
<thead>
<tr>
<th>Requirement</th>
<th>How Many of Each</th>
<th>Carnegie Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Discussion Boards</td>
<td>*7</td>
<td></td>
</tr>
<tr>
<td># of Words Required for Initial Posting:</td>
<td>*500</td>
<td></td>
</tr>
<tr>
<td>Initial Posting by Student:</td>
<td>*7</td>
<td>*280</td>
</tr>
<tr>
<td>Reading Discussion Board Postings:</td>
<td></td>
<td>*19.44</td>
</tr>
<tr>
<td># of Words Required for Responses:</td>
<td>*250</td>
<td>*420</td>
</tr>
<tr>
<td>Minimum # Required Number of Responses:</td>
<td>*2</td>
<td>*14</td>
</tr>
<tr>
<td>Reading Instructor’s Feedback</td>
<td>*10</td>
<td>*10</td>
</tr>
<tr>
<td>Quizzes</td>
<td>*4</td>
<td>*60</td>
</tr>
<tr>
<td>Weekly Lecture Notes</td>
<td>*8</td>
<td>*50</td>
</tr>
<tr>
<td>Links to External Websites</td>
<td></td>
<td>*20</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td></td>
<td>*180</td>
</tr>
<tr>
<td>Final Exam</td>
<td>*1</td>
<td>*180</td>
</tr>
<tr>
<td><strong>Total Contact Hours</strong></td>
<td><strong>67.79</strong></td>
<td></td>
</tr>
</tbody>
</table>

**# of Contact Hours Per Week: 8**

Note: * Denotes areas the instructor must complete
### Table 6
APUS Homework Contact Time Calculation Spreadsheet Example – Part II

<table>
<thead>
<tr>
<th>Requirement</th>
<th>How Many of Each</th>
<th>Carnegie Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all course materials electronic?</td>
<td>*1</td>
<td>*180</td>
</tr>
<tr>
<td># of Pages Read in Course Materials</td>
<td>*500</td>
<td>*694.44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.83%</td>
</tr>
<tr>
<td><strong>Formal Writing Assignment</strong></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Quantity</td>
<td>*2</td>
<td></td>
</tr>
<tr>
<td><strong>Writing Calculation:</strong></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.81%</td>
</tr>
<tr>
<td><strong>Researching Calculation:</strong></td>
<td></td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.59%</td>
</tr>
<tr>
<td><strong>Writing Preparation Time:</strong></td>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.40%</td>
</tr>
<tr>
<td><strong># of Misc. Assignments</strong></td>
<td>*0</td>
<td></td>
</tr>
<tr>
<td><strong>Student Studying/Preparation Time:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mid Term Preparation</strong></td>
<td>*0</td>
<td></td>
</tr>
<tr>
<td><strong>Final Exam Preparation</strong></td>
<td>*0</td>
<td></td>
</tr>
<tr>
<td><strong>Final Exam Preparation (w/o Midterm)</strong></td>
<td>*1200</td>
<td>24</td>
</tr>
<tr>
<td><strong>Quiz Preparation</strong></td>
<td>*240</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.40%</td>
</tr>
<tr>
<td><strong>Total Contact Hours</strong></td>
<td></td>
<td><strong>73.49</strong></td>
</tr>
<tr>
<td><strong># of Contact Hours Per Week: 9</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REFERENCES**


Dr. Karan Powell (kpowell@apus.edu) is Executive Vice President and Provost of American Public University System. Dr. Powell leads the academics department to ensure academic quality and online teaching effectiveness, focusing on student success, advocating for the faculty, and collaborating in the advancement of online instructional strategies and technology. Dr. Powell holds a doctorate in education from George Mason University, with a specialization in organization development and organizational learning. She has more than 30 years of experience in learning, leadership development, organization performance enhancement, and transformation in education, non-profit, business, and government settings.

Dr. Jennifer Stephens Helm (jhelm@apus.edu), Dean and Vice-President of Institutional Research and Assessment, American Public University System, joined the University in 2005. She leads the Institutional Research and Assessment department with a focus on enhancing institutional effectiveness by providing data and information that supports and strengthens institution-wide decision making, operations management, and strategic planning processes. Dr. Stephens Helm has an extensive background in learning outcomes assessment where she has consulted with schools, school districts, state departments of education, and school reform organizations. Prior to assuming a position with APUS in 2005, Dr. Stephens Helm worked with the Accelerated Schools Project at Stanford University, developing a nationwide electronic reporting system of outcomes for the school reform organization. She has taught at both K-12 and higher education levels. She has presented and published at both national and international conferences in the areas of school reform, distance learning, faculty development, institutional research, and assessment.

Dr. Melissa Layne (mburgess@apus.edu), Director of Research and Methodology, American Public University System. Dr. Burgess conducts innovative distance education research in a variety of K-12 and higher education insti-
tutional levels. Her current research interests focuses on instructional and aesthetic online course design, development, implementation, and assessment of various distance education platforms and tools. These platforms and tools include: (1) On-demand K-12 and higher education professional development; (2) learning management systems; (3) multi-user virtual environments; (4) collaborative media; (5) transformed social interactions and digital literacy through gaming platforms; (6) data visualization as a resource for shaping educational research; (7) predictive analytics as a tool for assessing individual student learning; and (8) adaptive or personalized learning environments. Her research and development of these tools toward teaching and learning contributes to her current role in seeking quality distance education delivery solutions.

**Dr. Phil Ice** (pice@apus.edu), Vice President of Research and Development, American Public University System, holds an Education Doctorate in Curriculum and Instruction with minor concentrations in Instructional Technology and Science Education. His research is focused on the impact of new and emerging technologies on cognition in online learning environments. Work in this area has brought him international recognition in the form of three Sloan-C Effective Practice of the Year Awards (2007, 2009 and 2010) and the AliveTek/DTA Innovation on Online Distance Learning Administration Award. Sloan-C has also recognized Phil through awarding a team he lead at APUS with the Gomory Award for Data Driven Quality Improvement in 2009. He has been recognized by industry through membership in Adobe's Education Leaders Group and Adobe's Higher Education Advisory Board, as well as a recipient of the Adobe Higher Education Leaders Impact Award, 2010.
TEACHER PROFESSIONALISM AND TEAM PERFORMANCE PAY: A MIXED METHODS STUDY

Pamela Wells
Julie P. Combs
Rebecca M. Bustamante
Sam Houston State University

The purpose of this mixed methods research study was to explore teachers’ perceptions of their professional behaviors when they worked in schools that awarded team performance pay. Teachers’ archival responses from two questionnaires were analyzed using mixed methods data analysis techniques (Year 1, n = 368; Year 2, n = 649). Most teachers had positive views of the team performance pay system. Lack of collaboration has been a criticism of some individual performance pay systems; however, teachers in this study believed that the team performance pay encouraged collaboration and attendance at staff development. Findings were interpreted using the framework of collective teacher efficacy. Additional studies are needed to explore the potential impact of various performance pay systems on professional behaviors of teachers.

Keywords: performance pay, educational reform, professional behaviors, teachers

Many employees in business and industry have the opportunity to receive merit, bonuses, or performance pay based on the attainment of accomplishing specific criteria or goals (Kanter & Lucas, 2007; Lawler & Mohrman, 2003). Comparatively, few teachers receive performance pay and even fewer receive team performance awards. For example, in 2007-2008, only 14.8% of teachers worked in districts that provided performance pay (U.S. Department of Education, 2008). Yet many politicians and business leaders have called for more pay systems that reward teacher performance (Podgursky & Springer, 2007b).

Performance pay plans in the 1980s were based primarily on individual performance and were, for the most part, not successful because of teachers’ perceptions of a lack of fairness (Murnane & Cohen, 1986). In order to combat these perceptions of a lack of fairness, collaborative or team performance pay programs have been developed. One type of team performance pay, school-based performance awards (SBPA), encourages teachers to work together to accomplish goals (Odden & Kelly, 2002). Collaborative or team performance pay programs have been developed in response to criticisms about individual performance systems (Odden & Kelly, 2002) which have focused on issues of fairness, motivation, and communication about the performance pay programs (Kelley, Heneman, & Milanowski, 2002). Although teacher collaboration has been suggested as a potential benefit of team performance pay systems, empirical studies are needed to understand how teachers perceive the impact of performance pay on their professional behaviors, particularly team performance pay systems.

Because many business and political leaders, as well as education reformers, have encouraged implementation of performance pay programs (Podgursky & Springer, 2007b), research is needed to inform program implementation. For this reason, some scholars (Lavy, 2002) have stressed the importance of conducting research related to educator performance pay, in that “before the introduction of school incentives becomes the next revolution in schools, much more concrete evidence is needed about the optimal incentive structure in schools and their effect and cost” (p. 1287). Additionally, performance pay programs have potential implementation challenges and financial costs that call for research-driven information that supports decision-making related to school performance pay program design. Moreover, findings from studies focused on team performance pay systems can be used by business leaders,
legislators, and policy makers to understand the impact that performance pay has on teacher professional practices.

The purpose of this mixed methods research study was to explore teachers’ perceptions of their professional behaviors when they worked in schools that awarded team performance pay. Archival data (both quantitative and qualitative) were analyzed from 2 academic years. These questionnaires were completed by 368 teachers during Year 1 of implementation and by 649 teachers during Year 2 who were eligible to receive team performance pay. In particular, responses to specific questionnaire items that elicited teachers’ perceptions of their professional behaviors in team performance pay systems were examined.

**REVIEW OF THE LITERATURE: TEAM PERFORMANCE PAY**

A review of the literature indicated that there is a continuing debate over the efficacy of using performance pay in schools. Although some studies have examined the relationship of performance pay to teacher retention and student achievement, few studies were found that examined the issues of teachers’ professional behaviors related to team performance pay.

Those who argue against performance pay for teachers point to its potential to impede teacher collaboration (Heyburn, Lewis, & Ritter, 2010). According to Lavy (2007), potential drawbacks or problems associated with performance pay and collaboration include the following: (a) measurement problems (i.e., agreement about goals as well as fair and accurate evaluations), (b) negative effects on collegiality, (c) unintended consequences (i.e., focus only on measurable dimensions or selected students and *game play* [cheating]), (d) increased costs, (e) union opposition, and (f) past failures of performance pay systems. Because of these concerns, some researchers have emphasized the possible benefits of group or team incentive pay structures, rather than individual performance pay, and argue that group performance pay can mitigate some of the issues of fairness. However, others have identified several drawbacks associated with team performance pay. Eberts, Holleneck, and Stone (2002) posited that “team based incentives may lead to free riders” (p. 916). Lavy (2007) identified this *free riding* as a potential problem, especially if a teacher’s reward share is small relative to the effort that must be expended. According to Lavy (2007), encouraging peer pressure and mutual monitoring can reduce the problem of free riding in a team performance pay program.

Other researchers have focused on the relative merits of team performance pay. Whole school or departmental team rewards encouraged goal focus and collaboration (Raham, 2000). According to Mohrman, Mohrman, and Odden (1996), group performance pay could be a more successful design when compared to individual rewards. Researchers have noted that additional research is necessary to study the impact of group performance pay programs (Perry, Engbers, & Jun, 2009; Podgursky & Springer, 2007a; Springer, Ballou et al., 2010; Springer & Gardner, 2010).

When considering how teacher behavior might change related to performance pay, Lavy (2007) posited that teacher performance pay could cause teachers to work harder to improve performance. One of the ways that teachers improve performance is through professional development and collaboration. These teacher behaviors are two areas of focus of this team performance pay research. For teacher effort to increase through motivation, Kelley (1999) suggested that teachers must understand the goals, believe they can accomplish them, and must see the potential rewards as valuable.

**CONCEPTUAL FRAMEWORK**

The conceptual framework used in this study about team performance pay and teachers’ professional behaviors was collective efficacy (Bandura, 2000). Collective teacher efficacy involves the “perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (Goddard, Hoy, & Hoy, 2000, p. 480) and is based on the earlier work of Bandura’s social cognitive theory. Of particular concern in this study were teachers’ perceptions of their professional behaviors in light of the possibility of receiving a team performance bonus based on the achievement of their students. The school district described in the context of the study provided a rich environment to examine perceived behaviors of teachers in specific areas of collaboration, staff development, and support. Contextual conditions that provided a rich environment for this study were that these teachers had the opportunity to earn team incentives and they worked with challenging student populations in identified at-risk schools.
METHOD

Mixed methods were used to address the research questions presented in this study. Mixed methods are based on a philosophically pragmatic paradigm, a paradigm that best addresses policy-driven topics such as teacher merit pay (Johnson & Onwuegbuzie, 2004). Specifically, a 13-step mixed methods research model developed by Collins, Onwuegbuzie, and Sutton (2006) was used to guide the methodological process in this study. Overall, the 13-step mixed method approach involves a series of steps within stages comprised of formulation (Steps 1-5), planning (Steps 6, 7), implementation (Steps 8-11), and writing (Steps 12, 13). Essentially, at each stage in the model, the researcher must take steps to identify the purpose for mixing quantitative and qualitative approaches, as well as explicate exactly how mixing will occur throughout the research process from sampling to data analysis, validation, and interpretation (see Collins, Onwuegbuzie, & Sutton, 2006). This 13-step model was used as a guide in this study because the extensive archival survey data included both quantitative and qualitative data as a primary data source and the researchers wanted to ensure data were given equal weight throughout the research process.

Context of the Study

The school district in this study was located in an urban/suburban area and had a student enrollment of 106,000 students. It was the third largest school district in a state located in the southeastern United States. Because of its neighborhood concept of school placement, the district had great disparity in student demographics, teacher retention, and teacher experience levels among its various schools (The Education Trust, 2008). The school district participated for 3 years in a grant program called the District Awards for Teacher Excellence (DATE). The DATE was funded by a state legislature designed to provide performance pay for teachers based on student performance gains. The objectives of the DATE program included an increase in students’ performance and teacher retention on at-risk campuses in the district. Secondly, school district administrators hoped that the team structure of the award would motivate teachers to collaborate to improve student performance. The teachers who responded to this survey were eligible for varying amounts of reward based on the courses and grade levels they taught. Those teachers who taught a course and grade level that was tested in the state accountability examination could earn a reward of between $3,500 and $5,500. Those teachers who did not teach a state-tested content and grade level were eligible for awards between $750 and $1,000.

Selection of Participants

Archival survey data were taken from a nested sample of a larger data set collected by the National Center on Performance Incentives at Vanderbilt University. The data used in this study included responses from all teachers in one school district that implemented performance pay for two academic years, 2008-2009 and 2009-2010. All teachers surveyed worked in schools that were Title I campuses with high percentages of students living in poverty. For 2008-2009, data from teachers at 13 elementary schools and six middle schools were used. For 2009-2010, teacher response data were used from 14 elementary schools and seven middle schools. Only the responses from teachers were used in our study and included 368 teachers for 2008-2009 and 649 teachers for 2009-2010. Some of the same teachers participated in the data collection from both years; however, we were not given permission to identify participants in order to compare individual responses.

Instruments

The two questionnaires used in the study originally were developed by research staff at the National Center on Performance Incentives to measure educators’ attitudes about the DATE or team performance pay program, the school environment, and teachers’ professional practices (Springer, Lewis, Ehlert et al., 2010). The instruments were administered online to all full time instructional staff members at all of the team performance pay program schools. The questionnaire had 55 items in the spring 2009 administration and 63 items in the spring 2010 administration. These items were divided into the following sections: (a) professional title, (b) attitudes about the program, (c) school environment, (d) curriculum and instruction practices, (e) background information, and (f) teacher compensation information. The attitudinal questions related to the DATE program and the school environments were designed with four structured-anchored response choices. Questions related to curriculum and instruction were focused on time and frequency response choices. Nine of the questions contained demographic data. Additionally, there were open-
ended responses on the two archival instruments that provided qualitative data; in this study these data were compared with the quantitative data.

**Data Analysis**

The archival data were analyzed using a mixed methods data analysis approach. Specifically, findings were integrated from both quantitative data analysis and qualitative analysis techniques (Onwuegbuzie & Combs, 2010) that involved descriptive statistics, a constant comparative approach (Strauss & Corbin, 1990) to analyze narrative responses, and the use of a matrix to identify similarities and differences across data. Descriptive statistics, including frequencies, were used to analyze closed-item responses. All open-ended responses were reviewed and coded by three different researchers, with particular attention to comments that reflected the notion of collective efficacy (Bandura, 2000). Codes were tallied to generate several themes that captured teachers’ perceptions of their professional behaviors as they related to the participation in the team performance pay system. After collapsing and re-categorizing themes and checking for unusual cases, findings from the quantitative and qualitative analyses then were combined on a matrix to identify the most prominent emergent themes related to teachers’ professional behaviors. In comparing quantitative and qualitative findings, four primary themes emerged, all of which reflected teachers’ favorable views of the performance pay system.

**FINDINGS**

The findings of this research indicated that most teachers had positive perceptions of the DATE team performance pay program. Overall, teachers' perceptions, as interpreted from qualitative and quantitative data, reflected their beliefs that the program (a) was worthwhile and generally accepted and supported by teachers, (b) helped them to improve their teaching practices in ways that might have improved student learning, (c) contributed to high quality professional development, and (d) positively impacted collaboration and collegiality.

**General Acceptance and Support by Teachers**

A key component of professionalism related to the general acceptance and support for the DATE program. The quantitative and qualitative findings suggested strong support from teachers for implementation, with 90.9% in Year 1 and 90.6% in Year 2 agreeing with the statement, "I am glad that the school is participating in the DATE program this 2008-2009 school year." Agreement was 70.4% to the item, "The DATE incentive plan at my school is helping to increase student learning" in the first year of implementation and 73.7% in the second year of implementation. A strong majority in Year 1 (72.6%) agreed with the statement, "The DATE incentive plan is helping to improve teaching practices at my school." Likewise, in Year 2 of implementation, 71.6% agreed with the same statement.

Qualitative results were also positive. In Year 1, a teacher stated, "I appreciate being recognized for doing a great job with my kiddos. THANKS." Supportive comments were stated in a variety of ways, including "Love the DATE program and hope it continues!" An additional teacher expressed that the program was a "good incentive for teachers." A teacher entreated, "Please keep this program at our school." Yet another teacher expressed, "This has been a wonderful opportunity to participate in DATE Grant." One enthusiastic teacher wrote, "Yea for DATE grant!!! Any extra money is very much appreciated." Another teacher expressed the same sentiment:

I do not feel the DATE grant changed me as a teacher because I am there for the kids not the money. With that being said, I do appreciate the money being given to the teachers of hard to fill positions in schools that are hard to keep staff. We work extremely hard on a daily basis to get our students to perform at a level of students who do not have to deal with the issues outside of school that our students do. It is nice to be compensated for the difficult job we do every day.

A few comments expressed an anticipation that some of their colleagues might respond negatively to the program because those teachers did not teach a course and grade level that could receive a maximum reward. The following teacher's comment was reflective of that position:

I think this is a good program. I feel that some teachers are resentful, but they do not even attempt to teach the subjects that will get them the incentives. I feel that I always do a good job, but it is nice to get monetary
recognition for our efforts with the students.

Support for the idea that teachers on at-risk campuses would be provided this benefit was reflected in the following statement:

I like the idea of rewarding teachers in a school that deals with a difficult group of students. We deal with daily issues that many other teachers in other schools don’t so it is great that we are trying to keep highly qualified teachers on our campus.

Improvement of Teaching Practices

The DATE program teachers generally indicated that participation in the program helped them improve their teaching practice because they felt motivated to do so. This was particularly evident in data collected during the second year of program implementation when teachers appeared to express greater overall support for the program and recognition that the DATE program provided incentives for teachers.

Several teachers indicated that they were working harder as a result of the DATE program. One teacher explained, “I believe the DATE program has helped increase the teachers’ performance and has increased student learning. TAKS-tested grades have truly kicked up their teaching practices.” Another teacher wrote a similar comment, “I think this program encouraged me to be a better teacher because there was something in it for me. It rewarded hard work.”

There were several comments specifically describing the motivational aspects of the DATE program. One teacher expressed, ‘The program motivates me to be a better teacher and professional.’ Another teacher noted, ‘The DATE program is a motivating incentive for educators.’ Although some teachers seemed hesitant to admit that the program’s reward was motivating, they still expressed support for the program. One teacher explained:

I feel that I have been working hard along with my students on their progress and would have been even if there wasn’t a DATE grant. However, I do see other people putting more effort and helping others to help in motivating students’ performance. Its nice to be rewarded for our hard work.

Another teacher expressed, “I feel that the DATE grant program is great. This really motivates all the staff in the school to get all students to perform at a higher level. This program has really united all of us.”

These narrative comments by teachers support the quantitative results indicating that teachers believed that the program motivated them to improve their teaching skills and strategies. In the first year of implementation, a majority (52.3%) expressed agreement with the statement, “I will change my professional practices to try and earn a DATE bonus award.” In the second year, the results were slightly higher, with 55.4% expressing agreement with the same statement. For the 2008-2009 survey, a strong majority (72.6%) supported the statement, “The DATE incentive plan is helping to improve teaching practices at my school.” In the second year of implementation, agreement with that statement was less, but still reflected a strong majority, with 68.6% expressing agreement that the DATE program was improving teaching practices. Both quantitative and qualitative results reflected strong support for the belief that the DATE program improved teaching practices in these at-risk schools.

Quality of Professional Development

Staff development is an important function of professionalism for educators. In both Years 1 and 2, for the category of staff development, the qualitative and quantitative data were positive. For the question, “The DATE incentive plan at my school is contributing to improvements in the quality of professional development offered to teachers,” 68.2% expressed agreement in 2009 and 64.9% in 2010. When asked to compare the amount of time spent on professional development activities compared to the prior school year, almost one half (48.8%) responded they spent more time “attending district- or school-sponsored professional development workshops.” A similar percentage (48.6%) of teachers responded that they were spending more time on staff development activities than last year by “engaging in informal self-directed learning” (e.g., reading subject-specific education research, using the Internet to enrich knowledge and skills).

When analyzing the open-ended statements, there were multiple comments coded into the category of staff development. Teacher comments reflected substantial support for both the learning and the pay associated with the staff
development component of the DATE program. One teacher articulated it this way:

I have had the opportunity to attend many workshops that have provided such wonderful information this year. This is my first year to teach special education and these classes have proven to be what I needed to gain new information. I have 18 years experience in the classroom and feel like this year has been the most fulfilling for me because of the great learning opportunities that the DATE grant has provided.

Another teacher shared, “I have seen an increase in staff development attendance due to the DATE grant.” A similar perception was expressed in this response, “I have been very pleased with the professional development opportunities with the DATE Grant. I feel that I have learned good information to use to impact my students.” Yet another teacher commented on the collaborative nature of the staff development by saying, “I liked how the DATE grant staff development brought schools of like demographics together so that discussions were relevant for our students.”

However, the qualitative data also revealed some negative perspectives about the staff development associated with the DATE program, especially the number and timing of workshop offerings. One teacher said, “The on-campus DATE classes have been infrequent and unorganized. They are held on days when teachers need to hold tutorials. The classes are not helpful.” Another teacher related, “Much more professional development should be offered for math instruction to teachers who need to reach struggling students.” One teacher shared a similar perspective, saying, “I feel there was only one chance offered for certain workshops. Sometimes there was a conflict I could not change. I missed out on the training.” A concern was also expressed about how teachers received credit and compensation for attending training:

Something needs to be changed about how credit is given for the online course work. Many teachers...did not get credit for doing the work. It was very discouraging to have put forth the time and effort and not receive credit for it.

Although there was some criticism of the staff development offerings associated with the DATE program, the majority of the open-ended teacher comments were positive and indicated perceptions of improvements in professional development offerings as a result of the program.

Positive Impact on Collaboration and Collegiality

Results from this research indicated that DATE team performance pay program participants believed that the program fostered collegiality and cooperation among teachers. The collaboration category was important for this research because this DATE grant was designed intentionally as a team performance pay program. Additionally, some researchers have identified team performance pay as a method of reducing some of the concerns about collegiality and cooperation related to performance pay (Lavy, 2007).

Quantitative data reflected a strong perception by teachers of increased collaboration the first year of implementation, especially when asked to compare perceptions to the previous year. For the first year, there were several items on the teacher survey that related to collaboration. When asked to identify how important each factor was in determining a teacher’s eligibility for a DATE bonus award, collaboration with faculty and staff was the third most important (57.8%) after improvements in test scores (69.3%) and teaching in hard-to-staff schools (58.4%). Only 23.9% agreed with the statement “The DATE incentive plan is causing resentment among teachers at my school.” When asked the question in a different manner, a similar response was given by teachers. There were 77.6% of the teachers who disagreed with the statement that “The DATE incentive plan is having a negative impact on the school culture and professional collegiality in my school.”

Additional questions related to a comparison from the first year of implementation (2008-2009) to the school year prior to implementation (2007-2008) had similar strong results. When asked if teachers “seem more competitive than cooperative,” 84.4% disagreed. Likewise, 87.3% disagreed with the statement that teachers “trust each other less.” A substantial majority, or 73.9%, said that compared to last school year, teachers “feel more responsible to help each other do their best.” Similarly, 65.7% indicated that compared to the last school year, teachers “can be counted on more often to help out anywhere or anytime, even though it may not be part of their official assignment.” When asked to compare specifically how they had changed their own teaching practices in the first year of implementation (i.e., 2008-2009) compared to the last school year (i.e., 2007-2008), 49% identified they had spent more time “reviewing
student test results with other teachers," and a slight majority (53.8%) said that they were “seeking help from/providing help to other teachers informally” more than they had the previous year.

Although few open-ended responses related to the category of collaboration in the first year, those comments that were analyzed were all positive about the effects of the DATE program. One teacher responded, “I learned from the online module discussions [and] questions and got ideas from other teacher responses.” Another teacher mentioned the importance of teachers understanding the impact that collaboration would have on receiving a reward by saying, “They [administration] need to emphasize that this is an incentive for us all to work together to improve student performance (especially in TAKS-tested areas), so if they can help us out, it will benefit them financially.” One teacher explained how the DATE program encouraged collaboration through interdisciplinary and cross-content instruction:

The DATE program allowed us to integrate more subject areas. As teams we were able to meet and discuss what each subject was doing and help each other reinforce concepts taught in the subjects. It helped us to come together and help us teach our students that subjects intersect. At first the students didn’t understand why were [sic] were discussing science in a reading class or world culture events, and now they see how all the subjects interconnect with each other.

Another teacher described the benefits of working collaboratively in evaluating data:

It has been a learning experience especially when our team did the data dig. Coming together and seeing the areas that students were strong and weak.... Also, we tried focusing more on those weak areas when we taught and the test questions we asked.

For the second year of the survey (2010), quantitative and qualitative data continued to reflect support for the impact the team performance pay program had on collaboration and collegiality. When considering the quantitative survey data, there was a slight increase in positive responses to the question, “The DATE incentive plan is causing resentment among teachers at my school.” There was a 33.8% agreement, which was an increase of 10.2% from the prior year. These data still reflected that the majority did not believe the DATE program was causing resentment. Teachers disagreed strongly (81.1%) that teachers “seem more competitive than cooperative.” Similarly, 86.2% disagreed with the statement that teachers “trust each other less.” Another strong majority of teachers (76.5%) responded that they “feel more responsible to help each other do their best.” When asked, “Can teachers be counted on more often to help out anywhere or anytime, even though it may not be part of their official assignment?” 70.1% agreed. When asked to identify how they had changed their teaching practices this year (2009-2010) from the last year (2008-2009), one half of the teachers (50.8%) indicated they were more often “seeking help from/providing help to other teachers informally.” Based on the numerous quantitative responses, the teachers perceived that the DATE team performance pay program was related to increased collegiality.

Additionally, there were several open-ended comments related to collaboration on the spring 2010 survey. One teacher expressed, “I feel that the DATE grant program is great. This really motivates all the staff in the school to get all students to perform at a higher level. This program has really united all of us.”

In the second year, some teacher respondents expressed a preference for individual rewards rather than a group reward. As one teacher expressed,

Our DATE program was based solely on the team. However, my individual performance for both my classes far surpasses others and yet I never get any money. I cannot control the interest, and commitment of others, only myself. I have consistently reached my goals, but because my team does not, there is no monitory [sic] gain for me. Although I am not in it for the monitory [sic] gain, it is frustrating to see others get it.... Like a chain, the team is only as strong as its weakest link. We as teachers are not the ones who hire others, nor can we impose and instill our values and beliefs on others who have no desire to change.

Another teacher concurred with this comment:

It would be better to evaluate eligibility for awards based on individual teacher performance rather than as a grade level. Last year we had a teacher who was moving schools so she made no secret of not caring and not trying for the award. The rest of the team had to pull her scores up as well as raise ours to much higher levels.
In conclusion, the preponderance of quantitative and qualitative responses from teachers to questions related to collaboration for both years of the survey indicated that teachers perceived the DATE team performance pay program was related to increased collegiality.

**DISCUSSION**

Some researchers have reported the potential for negative effects on teacher professional behaviors, collegiality, and teacher collaboration as a result of performance pay programs (e.g., Adams, Heywood, & Rothstein, 2009; Eberts, Hollenbeck, & Stone, 2009). However, the results of our study reflected a positive perception of teacher behaviors and teacher collegiality by the teachers surveyed. The qualitative responses further suggested that the team design of this performance pay program could have been a factor in these positive results.

Additionally, the results of this study have implications for the development and implementation of other performance incentive programs as they relate to teacher professionalism. Based on the findings discussed in the previous section, performance incentive programs such as DATE might motivate teachers to improve their teaching; however, teacher motivation has been found to be influenced by numerous other factors that do not necessarily involve financial incentives (Kelley, Heneman, & Milanowski, 2002).

In this study, there was evidence that professional development quality and opportunities were enhanced as a result of the existence of the DATE program. Typically, performance incentive programs provide stipulations for professional development that goes beyond the staff in-service opportunities typically offered to teachers. Additionally, funds provided by the program can make professional development more viable. In considering implementation of future performance programs, district leaders should more closely consider the needs of individual school sites, as well as design effective ways for teachers to obtain credit and recognition for completing professional development. In particular, in this study some teachers expressed concern about obtaining credit for staff development offered on-line. On-line professional development requires careful planning and design to address both technological and content challenges.

The increased collaboration and cooperation among teachers in the DATE program was a surprising, yet important finding in this study. Although teacher retention was the primary goal of the DATE program, collaboration emerged as a key outcome reported by teacher respondents. Literature on professional learning communities and teacher collaboration suggests that teacher collaboration can positively impact student achievement (Goddard, Goddard, & Tschannen-Moran, 2007; McLaughlin, 2006) because teachers’ skills and ideas are shared and, therefore, enhanced for the betterment of students. Teacher collegiality, engagement, and learning are also enhanced in the collaborative process (McLaughlin, 2006). Based on the findings of this study, districts that decide to implement teacher incentive programs should focus on team models rather than individual models.

**CONCLUSION**

Our research indicated a positive teacher perception of the team performance pay program. Teachers reported in both the quantitative and qualitative data that they supported the program and believed it was related to increased student learning at their schools. The data reflected that the program helped to improve the quality and participation in staff development. Additionally, a strong majority of the teachers indicated the team performance pay program resulted in enhanced teacher collaboration and collegiality.

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67-100.


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HOMELESS HIGH SCHOOL STUDENTS IN AMERICA: WHO COUNTS?

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After interviewing homeless high school students, the research team in a Colorado school district discovered that many students had not revealed their true living conditions (homelessness) to anyone in the school district. This research team developed an anonymous survey written around the homeless categories identified in the McKinney-Vento federal legislation. Results revealed students who identified as homeless for a portion of their high school years in numbers and percentages alarmingly higher than the district had on file. In fact, over 25 times as many homeless students were identified by this process than by the previously-used district system for identifying homelessness. An equally alarming finding is that very few students identified their homeless status to a teacher, counselor, or school administrator. This article identifies statistical patterns to predict homelessness and provides recommendations for administrative practices.

Keywords: homeless, students, predictors, McKinney-Vento

The increasing number of homeless high school students has made national news over the past few years. The current national unemployment rate continues to hover around 10%, adding to the likelihood of the importance of this issue (United States Department of Labor, 2011). This article reviews the national issue, briefly reviews the McKinney-Vento Act, provides details of a study identifying issues related to homelessness, and offers policy suggestions for secondary school principals.

NATIONAL NEED: THE INCREASING NUMBERS OF HOMELESS TEENS

The number of individuals and families who become homeless due to economic hardship, mental illness, or domestic violence has steadily increased on a national level as our economy has declined (NCFH, 2010). The U.S. Department of Housing and Urban Development (HUD) 2008 Executive Summary report indicated that of the approximately 750,000 people who were homeless on a January night in 2006, around 330,000 (44%) were left unsheltered, while 420,000 (56%) were housed in shelters. The report adds that, on average, around 20% of the people in a shelter at any given time are children.

According to the National Center on Family Homelessness (NCFH), as many as 1.5 million children, or 1 in 50, experience homelessness each year (NCFH, 2009). Homeless children not only experience a lack of safety and privacy, but also lack adequate health care. As time goes by, these children often lose their sense of community and sustained relationships and are likely to become among the highly mobile and move from school to school. According to data from NCFH, homeless children often have to repeat grades, are more likely than their non-homeless counterparts to be suspended or expelled, and are among the growing numbers of high-school dropouts (NCFH, 2009; 2010).

THE HIGH COST OF HOMELESSNESS

Mobility and/or residential instability have a negative effect on student academic achievement (Heinlein & Shinn, 2000). Residential instability and extreme poverty are two major factors that influence academic failure (National...
Association for the Education of Homeless Children and Youth, 2009). Homeless youth often come from unstable families (Paradise & Cauce, 2002), but, more recently, research has shown that a large percentage of homeless youth were once part of the foster care system (Aviles de Bradley, 2010; Coates & McKenzie-Mohr, 2010). Mobility not only increases the probability of academic failure and drop out, but is also related to health and behavioral problems (Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993). It is estimated that around 5,000 runaway or homeless youth die each year due to illness, suicide, or assault (Klein, Woods, Wilson, Prospero, Greene, & Ringwalt, 2000).

Homeless high school students number almost 3000 across the state of Colorado where this study was conducted. In the state ranking by The National Center on Family Homelessness (2009), Colorado ranked 35th in its efforts to address this issue on four levels: extent of child homelessness (rank 38); child well-being (rank 12); risk for child homelessness (rank 32); and state policy and planning (in the early stages). Connecticut was ranked number one (the best performance), while Texas was ranked number 50 (the worst performance).

**MCKINNEY-VENTO ACT**

Under the McKinney-Vento Act, each state can apply for federal monies to provide coordination of the education of homeless children and youth by gathering comprehensive data on the homeless youth and identifying the barriers that prevent the homeless from attending school regularly (United States Department of Education, 2010). “States are required to have an approved plan for addressing problems associated with the enrollment, attendance, and success of homeless children in school” (DOE website).

Subtitle B of Title VII of the McKinney-Vento Homeless Assistance Act defines “homeless” as follows:

The term “homeless children and youths”—

(A) means individuals who lack a fixed, regular, and adequate nighttime residence (within the meaning of section 103(a)(1)); and

(B) includes:

(i) children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; are abandoned in hospitals; or are awaiting foster care placement;

(ii) children and youths who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings (within the meaning of section 103(a)(2)(C));

(iii) children and youths who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and

(iv) migratory children (as such term is defined in section 1309 of the Elementary and Secondary Education Act of 1965) who qualify as homeless for the purposes of this subtitle because the children are living in circumstances described in clauses (i) through (iii). (Title X, Part C, of the No Child Left Behind Act)

**BACKGROUND OF THE STUDY**

In 2006 a team of local administrators from a suburban upper middle class city in the mountain west conducted a qualitative survey regarding homelessness and high mobility. During those interviews, parents and students indicated an awareness of many homeless families previously unidentified by the district. In essence, the interviews revealed the secret world of community homelessness. The interviews also identified a “donut hole” in high school homelessness. In Colorado, services for homeless high school students were not available for students under the age of eighteen. This made it very difficult for students who had run away from home or whose parents were not caring for them or providing assistance of any kind.

Another major issue that emerged from the interview process was the fear students had of being labeled as homeless. Students reported going out of their way to look clean and act as if they were coming from home to school and
returning home after school.

From the qualitative data and a new sense of awareness, an administrative team from the district developed an online quantitative survey that included questions directly related to the information gleamed from the interviews and using the definitional language of homelessness as outlined within the McKinney-Vento Homeless Assistance Act.

First, a pilot quantitative survey was developed and administered to 80 students at one alternative high school within the district where data were collected. The results of that survey were surprising for district administrators. The pilot data indicated that many more students fit into the McKinney-Vento definition of being homeless than were previously identified by the district. Revisions were made to the instrument and a final web based instrument was finalized in the spring of 2008.

**PROBLEM STATEMENT**

It seemed apparent from the pilot study that homelessness was being underreported within the district. The problem was to develop a process that would better reflect the reality of homeless numbers homeless within the district. The purpose of the study was to provide more realistic data on homelessness and develop recommendations that would help teachers and administrators understand the complexity of the homeless issue. Using the McKinney-Vento Act as a guide for wording, combined with themes identified from the qualitative interviews as well as lessons from the pilot study results, the final instrument was developed.

**RESULTS**

Descriptive Findings

Of the available high school population, the survey return rate was 50% (N=2566). A noticeable variation of response rates occurred within grade level. The response rate for 9th grade students was 32.5% (N=829); 30.8% (N=785) for 10th grade, 23% (N=586) for 11th grade, and 13.8% (N=352) for 12th grade students. This is considered a high response rate (Dillman, 2007).

The sample was representative of the school’s population in terms of its demographic makeup. Students represented by sex were 52% females (N=1326) and 48% male (N=1222). The percentage who reported “White” as their ethnicity was 81.2% (N=2064), “Hispanic” 12.9% (N=327), “Black” 2.1% (N=53), “Asian/Pacific Islander” 2.0% (N=50), and “Native American” 1.9% (N=48). For statistical purposes, all who identified as something other than “White” were grouped together (N=478, 18.2%), which is representative of the community population statistics. Table 1 presents the descriptive finding from questions pertaining directly to homelessness. In accordance with IRB regulations, all student identifiers were removed by the school district prior to the researchers’ obtaining the data. Note that the numbers do not always add to the total respondents, due to missing values.

Inferential Findings

Of the 2,425 usable responses, there were 584 students (24%) from six high schools who reported that they lived away from their parents at some point during their high school years, but only 177 of the 584 students indicated that they informed the school that they were not living with their parents. Previously, the school district reported 21 students who had self reported as being homeless.

Counselors and Administrators Ill-informed of Student Homelessness

When asked the question, “During your high school years when you weren’t living with your parents, who did you go to for help?” only 1.2% (N=30) went to school counselors or school administration for help. A troubling extension to this problem came from the responses of the homeless high school students who, when asked, “In the future, if a situation arose that caused you to stop living with your parents, who would you go to for help?” only 4% of the respondents indicated that they would go to their school counselors or administration for help.

Student Mobility

There were 258 respondents (11%) who reported changing schools six or more times during their educative years.
Table 1
Descriptive Results of the Survey

<table>
<thead>
<tr>
<th>Number</th>
<th>Percent</th>
<th>Information/question</th>
</tr>
</thead>
<tbody>
<tr>
<td>569</td>
<td>22.2%</td>
<td>Of all respondents reporting being homeless under the federal McKinney-Vento definition.</td>
</tr>
<tr>
<td>81</td>
<td>14.2%</td>
<td>Of the 569 reporting being homeless, indicated that they were homeless with their entire family.</td>
</tr>
<tr>
<td>124</td>
<td>21.8%</td>
<td>Of the 569 reporting being homeless, indicated that they sought no help while living away from home.</td>
</tr>
<tr>
<td>421</td>
<td>73.9%</td>
<td>Of the 569 reporting being homeless, asked relatives and friend for help</td>
</tr>
<tr>
<td>31</td>
<td>5.5%</td>
<td>Of the 569 reporting being homeless, reached out to a teacher, counselor, or administrator for help.</td>
</tr>
<tr>
<td>399</td>
<td>70.1%</td>
<td>Of the 569 reporting being homeless, did not let the school know that they were living away from their parents.</td>
</tr>
<tr>
<td>335</td>
<td>58.9%</td>
<td>Identified transportation as their greatest need.</td>
</tr>
<tr>
<td>256</td>
<td>44.9%</td>
<td>Identified food and clothing as their greatest need.</td>
</tr>
<tr>
<td>120</td>
<td>21.1%</td>
<td>Identified medical issues as their greatest need.</td>
</tr>
<tr>
<td>21</td>
<td>3.6%</td>
<td>Students were listed as homeless in district files prior to this study</td>
</tr>
</tbody>
</table>

Interestingly, 380 (15%) of the respondents reported moving three or more times within the past four years, and 57% of those highly mobile students reported that the feeling of being accepted by other students and teachers/staff related to their homeless condition was difficult to obtain. The reader should note that mobility is referenced in two different ways: first, the number of K through 12 schools attended; second, the number of times a student physically moved in the previous four years. Table 2 displays correlation information for all variables used in the analyses. The correlation of the two mobility variables was $r_s (2426) = .43, p < .001$. This indicates that students who reported frequently moving also reported that they attended a higher number of schools than non-mobile students. It is possible to move and still attend the same school, or transfer to another school while staying at the same physical address. Outliers of demographic patterns with the highly mobile students in terms of amount of schools attended raised an issue of concern. On the extreme end, 13 students indicated that they had attended 21 or more schools for their K through 12 education.

The data for the following analyses were not normally distributed because homelessness and living in a juvenile facility is not something that happens to the majority of students; therefore non-parametric statistics were used for all of the analyses. To investigate if there was a statistical significance associated between the number of schools attended and amount of juvenile facilities lived in (treatment center, jail, mental health, and hospital), a correlation (Spearman rho) was computed: $r_s (2482) = .23, p < .001$. The positive direction indicates that students who attended more schools tended to have lived in more of the juvenile facilities. Using Cohen’s (1988) guidelines, the effect size is considered to be medium or typical. Another correlation was computed to assess the relationship between number of schools
attended and the number of places lived with parents or family members (hotel, RV park, shelter, with another family, car or abandoned building). The Spearman rho statistic was computed: \( rs(2481) = .20, p < .001 \). Once again the positive direction indicates that students who attended a high number of schools often lived with their family in more of the places previously mentioned (hotel, RV park, shelter, etc.). Using Cohen’s guidelines (1998), the effect size is medium or typical.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Amount of schools attended (K – 12)</td>
<td>--</td>
<td>.43*</td>
<td>.23*</td>
<td>.20*</td>
</tr>
<tr>
<td>2. Amount of times moved</td>
<td>--</td>
<td>--</td>
<td>.18*</td>
<td>.26*</td>
</tr>
<tr>
<td>3. Amount of juvenile facilities lived in</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.34*</td>
</tr>
<tr>
<td>4. Amount of classified “homeless” places lived in</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* \( p < .001 \)

To investigate if there was a statistical significance between number of times moved in the last four years and amount of facilities lived in (treatment center, jail, mental health, and hospital), a correlation was computed, \( rs(2482) = .18, p < .001 \). The positive direction indicates that as students become more mobile, they are more likely to find themselves spending time in a juvenile facility. Using Cohen’s (1988) guidelines, the effect size is considered to be small or smaller than typical, which supports previous research by Mallett, Rosenthal, Myers, Milburn, and Rotheram-Borus (2004), in which they found that, on average, homeless youth had spent more time in juvenile detention centers than their non-homeless counterparts. Another correlation was computed to assess the relationship between number of times moved and number of places lived with parents or family members (hotel, RV park, shelter, with another family, car or abandoned building). The Spearman rho statistic was computed: \( rs(2499) = .26, p < .001 \). Once again the positive direction indicates that students who moved more often have lived with their family in more of the places mentioned above. Using Cohen’s guidelines, the effect size is medium or typical.

Hierarchical logistic regression was conducted to investigate how well number of times moved in the last four years and number of schools attended predict whether or not a student has been homeless or lived in a juvenile facility (treatment center, jail, mental health facility, or hospital), while controlling for gender and ethnicity. The literature indicates that African American and Latino children have higher poverty rates than Caucasian children (Popp, 2004). The goal of the regression analysis was to investigate the relationship of mobility and homelessness, not the effect of demographic variables; therefore, taking out the variance in homelessness accounted for by gender and ethnicity provided a better representation of the relationship between mobility and homelessness. When gender and ethnicity were entered alone, they significantly predicted homeless/lived in a facility, \( \chi^2 = 31.73, df = 2, N = 2407, p < .001 \). However, as indicated by the pseudo \( R^2 \) (Nagelkerke), only 2% of the variance in homelessness could be accounted for by knowing the student’s gender and ethnicity. When the other variables were added (number of times moved and number of schools attended), the overall predictive model improved, \( R^2 \) (Nagelkerke) = .172, indicating that 17% of the variance in homelessness could be predicted, or accounted for, by knowing number of times the student moved and number of schools attended. The hierarchical logistic model correctly classified 97.4% of the students who had never been homeless, but only correctly classified 18.1% of students who had been homeless. The overall model correctly classified 79.8% of students. Table 3 presents the odds ratios, which suggests, that a highly mobile student is almost two times more likely of becoming homeless/living in a facility than a student who is not highly mobile.

The overall model correctly classified about 80% of the students, but the problem is that it only correctly classified 18% of the students who, at one time, were considered homeless. Correctly classifying students who have never
been homeless is important to the overall model, but the predictive model provided here clearly needs to be improved. Mobility appears to be a significant factor within homelessness, which aligns with previous research (Heinlein & Shinn, 2000; Paradise & Cauce, 2002) but other, yet to be identified factors in combination with mobility, may be better predictors of homelessness.

### Table 3

**Hierarchical Logistic Regression Predicting Homelessness (level two, after controlling for gender and ethnicity)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of times moved last 4 years</td>
<td>.50</td>
<td>.06</td>
<td>1.65</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Number of schools attended K-12</td>
<td>.34</td>
<td>.05</td>
<td>1.41</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.17</td>
<td>.29</td>
<td>.04</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note: B = the unstandardized coefficient (the effect of the predictor variable on the predicted variable); SE = standard error.*

### DISCUSSION

Not surprisingly in the peer-pressured world of high school students, homelessness carries a stigma that students want to avoid. A survey instrument that identified key elements of McKinney-Vento Act helped construct a more realistic view of homeless high school students. However, caution should be taken when interpreting the statistics. There is little doubt that some of the students who identified themselves as living away from home may have done so for a short time for practical purposes (staying with friends or relatives for a week or two for social reasons or for a break from mom or dad). However, it is equally clear that a survey instrument similar to the one used in this study may be far better in helping administrators obtain a clearer assessment of homelessness numbers in their district or school. At least in this study, district reporting through an anonymous web site identified more than eight times as many homeless students (using the McKinney-Vento federal definition) than the previously used student self-reporting data collection techniques applied within the district. Our findings are supported by a recent meta-analysis of eight different studies by Miller (2011).

Perhaps the most alarming finding was students’ unwillingness to tell school officials of their homeless plight. Given the response rate of this study and the extreme differences between those who had self reported being homeless to the school and the numbers reported here, there is little reason to believe that similar gaps do not exist across the country.

### Identifying Homeless Students

Homeless students need to be identified before it is possible to adequately predict students who are at risk of becoming homeless and the impact on achievement, behavior, and the school culture. Homeless liaisons funded by some school districts work on identifying homeless families, but not all liaisons are funded full time, and they often have other workloads (Cunningham, Harwood, & Hall, 2010). The McKinney-Vento Act provides services for homeless students, but parents often do not know about these services and/or do not want to identify as homeless because of the stigma and fear of child services involvement.

It is imperative that steps be taken to help identify homeless students. District budget cuts make it difficult to have full time homeless liaisons, especially for rural districts; therefore, low cost methods need to be used. For instance, schools could take on the role of the homeless liaison by asking parents about their living situation at orientation days and providing parents with contact information about support services. In order for homeless students to be identified, they and their parents need to feel safe and have somebody at the school level they can trust.
Recommendations for Practice

The authors provide the following recommendations for administrators, teachers, and counselors to consider when dealing with district wide homeless issues and with the interpretation of the McKinney-Vento Act. Although this study was from one district within the state of Colorado, the large return rate provides some assurance of external validity to districts with similar demographics nationwide. This study provides evidence that, in at least one district, student self-reporting of homelessness to their school was not an effective way of identifying students who fit the McKinney-Vento homeless definition.

Districts are encouraged to find a safe way for homeless students to report their condition. The process we used was an anonymous web based survey; however, districts might consider techniques such as snowballing (learning who is not reporting their homeless status from students who do report their homeless status), use of teachers, administrators, or counselors who are trusted by homeless students, and/or dealing with church groups and homeless shelters to help identify students in need.

Students who move frequently from school to school or who move geographically are at twice the risk of being homeless than students with less mobility. Although this is not a surprising finding for educators, high mobility is a warning sign that can be used to sensitize teachers, counselors, and administrators to the increased odds of potential homelessness among high school students.

REFERENCES


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The authors formed a research team composed of teachers, administrators, and university researchers. The authors of this article served as unpaid consultants to the project through a Research Methodology Program in the School of Education at Colorado State University.
JOB SATISFACTION OF CERTIFIED NURSE MIDWIVES: AN EXAMINATION

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Health care providers face pressure to reduce costs and enhance patient satisfaction. One approach is to employ primary care providers such as nurse practitioners, physician assistants, and certified nurse midwives. Since there is a positive relationship between job satisfaction and patient satisfaction, positive job satisfaction on the part of providers, such as midwives, can translate into patient satisfaction. This research explores the degree of job satisfaction exhibited by certified nurse midwives. The data derives from a survey of 2000 CNM members of the American College of Nurse-Midwives. The survey captures job satisfaction factors, including interactions with physicians and nurses, job tasks, organization policies, pay, job autonomy, professional status, and job requirements and demographics. The findings reveal that the factors associated with overall job satisfaction are conditioned by midwives’ places of work. While levels of job satisfaction are high, those factors associated with it vary by workplace. Therefore, strategies designed to enhance job satisfaction for certified nurse midwives should relate to the locus of work and its environment.

Keywords: certified nurse midwives (CNMs), overall job satisfaction, job satisfaction factors, places of work

The objectives of this research are to identify the factors of certified nurse midwives’ [CNMs] job satisfaction and then explore their association with overall job satisfaction. Once job satisfaction components are identified and relationships are established, efforts to enhance CNM job satisfaction can be implemented through human resource management practices. The results may be improved recruitment, higher retention rates, delivery of better healthcare, and increased patient satisfaction (Shipman, 2006). Of course, health care providers should strive to reduce costs and increase patient satisfaction. The driving forces include actual and probable implementation of new government policies and regulations, cost pressures derived from both employers and insurance companies, and intensified competition. It is imperative for providers to develop strategies shielding themselves from the effects brought on by existing applications and impending alterations in health care reform.

A strategy increasingly emphasized is a work force which includes primary care providers such as nurse practitioners, physician assistants and certified nurse midwives. Research indicates that these providers are the primary agents in efforts to satisfy patients and contain costs (Ganesh, Arnold, & Reynolds, 2000). Studies reveal a direct and positive relationship between job satisfaction and patient satisfaction (Homburg & Stock, 2004). Thus, positive job satisfaction on the part of a midwife can translate into positive emotions related to patient satisfaction.

The implementation of new strategies will require that some be performed by healthcare practitioners, rather than by physicians (Hartley, 1999). The number of women in the United States giving birth with midwives has more than doubled since 1990 (Nursing, 2006). In turn, the number of CNMs has grown 38% in the past few years (Simmons & Habib 2007). As these and other events and forces evolve, the work of practitioners, such as CNMs, functioning in roles shared with physicians will certainly amend the health care work environment and may expand their professional status. Certainly, such modifications may impact on job satisfaction.
CONCEPTUAL FRAMEWORK

Job Satisfaction

Job satisfaction is an emotional state which results from one’s appraisal of the job as meeting the expectations of one’s job or values (Locke, 1969). There are numerous job satisfaction conceptual frameworks. These include applications of need fulfillment theory, social reference theory, and two-factor theory. While there is no consensus regarding which conceptual definition is most appropriate, job satisfaction research is extensive. One general conclusion from this large body of literature is that job satisfaction encompasses many factors or dimensions, including pay, job tasks, status, organization policies, and interaction with co-workers. The majority of job satisfaction studies support the notion that it is multifaceted and that jobs have the ability to meet specific individual human needs. With the changing work environment in healthcare and a growing role for practitioners, there is a need to examine job satisfaction among health care professionals such as certified nurse midwives.

Job satisfaction has been shown to be of great consequence in the recruitment, retention, and overall image of health care professionals (McCarthy, Tyrrell & Lehane, 2007). Studies demonstrate that low job satisfaction leads to high turnover among nurses and midwives (Curtis, Ball & Kirkham, 2006). Also job satisfaction affects the quality of service and the organizational commitment of employees (Bourgeault, Luce & McDonald, 2006).

Job Satisfaction and Midwives

While there are numerous job satisfaction studies of health professionals, especially nurses and physicians, studies that explore CNM job satisfaction are limited in number, and they are dated. An early study found CNMs to be satisfied with their jobs (Collins, 1990). An Australian study found job satisfaction was associated with patient and colleague interactions (Watson, Potter & Donohue, 1999). A study of first-year CNMs found no relationship between job satisfaction and mentoring (Cuesta & Bloom, 1998).

Other inquiries into CNM job satisfaction are limited in scope. Most focus on one or two aspects or primarily on overall job satisfaction. One investigation found that midwives who left and later returned to their practices did so because of previous high job satisfaction experiences (The University of Sheffield, 2006). Cattrell, Lavender, Wallymahmed, Kingdon, and Riley (2006) demonstrated that midwives gained considerable overall job satisfaction by continuity of care for patients. An examination of midwives in birth centers showed high levels of job satisfaction because the midwives felt their skills were needed and gave high satisfaction to patients (Bainbridge, 2006). Another inquiry conducted in Iran found that 49% of the midwives surveyed exhibited moderate levels of job satisfaction, 49% reported low satisfaction, and 2% conveyed high levels of job satisfaction (Mirmolaei, Dargahi, Kazemnejad, & Mohajerahbari, 2005). Using correlation analysis, the study revealed no significant relationship between overall job satisfaction and various demographic variables, such as age, academic degree, and salary. A study of Estonian midwives found no significant association between job satisfaction and age, ethnicity, work abroad, or increased responsibility (Lazarus, Rasch & Liljestrand, 2005).

A review of the literature on factors affecting the retention and turnover of midwives indicated that job aspects associated with job satisfaction, such as working hours, workload, and appreciation of contribution, received high ratings, and, consequently, are important factors for retention of midwives (Cox & McBride, 2004). An investigation of midwives in Turkey explored levels of work-related stress, burnout, and overall job satisfaction (Oncel, Ozer, & Efe, 2007). It was found that the level of work-related stress and levels for emotional exhaustion were moderate, while general work satisfaction was high. Another job satisfaction study of health care workers in Turkey, including general practitioners, nurses, technicians, and midwives, showed that midwives had the lowest overall job satisfaction scores (Bodur, 2002).

The research reviewed leads to the conclusion that the findings are mixed and sometimes contradictory, and that more investigation of CNM job satisfaction is needed. This study examines the levels of CNM job satisfaction and the association of job satisfaction factors, demographics, and places of work, with overall job satisfaction.
PROPOSITIONS

Proposition 1: Certified Nurse Midwives Possess a Positive Degree of Job Satisfaction

The overall level of satisfaction experienced by employees has been found to be highly correlated with occupational status (Lopez & McMilian-Capehart, 2009). Theories of intrinsic motivation are useful in explaining much of the job satisfaction of professional people. The underlying rationale is that job satisfaction is derived from both meaning of work and meaning at work. Highly productive and satisfied employees see themselves and their work as inseparable. They find motivation in the work itself and are professionally committed to their employers (Chalofsky & Krishna, 2009). Keeping these factors in mind, it is anticipated CNMs will exhibit high and positive levels of job satisfaction.

The structuralist camp of institutional theory examines differences in job satisfaction factors by occupational status. The research indicates that professionals often display similarities regarding the job and the work that produces satisfaction (Hoffman & Ventresca, 2004). This indicates that professionals tend to adopt job satisfaction features already popular in the profession. An important hypothesis of the structuralist camp is that professionals become increasingly isomorphic over time as they collectively incorporate templates in search of legitimacy (Heugens & Lander, 2009). Therefore, it seems logical that members of the same profession will manifest and share distinct features of their work and job satisfaction.

Proposition 2: Certified Nurse Midwives’ Job Satisfaction Components Vary by Places of Work

It is possible that the place of work and its organization climate impact how CNMs perceive the relevant job satisfaction factors. The theory of organizational climate proposes that climate consists of the shared perceptions of employees concerning the practices, procedures, and kinds of behaviors that are rewarded and supported in a particular setting (Schneider, White, & Paul, 1998). This theory focuses upon how structural and dynamic aspects of culture become nested, are taken for granted, and are transmitted within the institution (Kondra & Hurst, 2009). The climate shapes employee perceptions of what is important and what behaviors are expected and rewarded in the organization (Bowen & Ostroff, 2004). Organization climate has been found to impact the job satisfaction components embraced by employees (Mathieu & Zajac, 1990). The literature suggests that organization climate is a particularly powerful social mechanism that affects individual attitudes because climate shapes how employees construe the meaning of organization practices. Essentially, organization climate shapes employee job satisfaction (Borucki & Burke, 1999); therefore, job satisfaction factors and overall job satisfaction differ by places of work.

In addition to the propositions discussed above, this study explores whether job satisfaction is conditioned by the demographics of age, education level, marital status, and salary level. These are commonly employed demographics which have been shown to be significant contributors to job satisfaction in multiple studies of employees in various occupations. Clark and his colleagues, for instance, have provided evidence of these effects (Clark, Kristensen, & Westergard-Nielsen, 2009).

METHODS

Measures of Job Satisfaction

In this study, job satisfaction is assessed by adopting an instrument generated by Stamps and Piedmont for use in health care (1986). The scale’s conceptual basis is that job satisfaction is a multidimensional concept composed of three internally controlled variables [sometimes referred to as professionalism] and three externally controlled variables [often called organization variables]. The three external variables are a) pay, referring to workers perceptions of financial reimbursement for work accomplished; b) task requirements, defined as those activities that must be performed as an integral part of the job; and c) organizational policies, defined as administrative policies and procedures established by superiors at the workplace. The three internal components are a) professional status, seen as the importance professionals perceive regarding their work; b) autonomy, defined as the extent of job-related independence; and c) interactions with professional colleagues. Significantly, the interaction with colleague component of the job satisfaction scale consists of two parts. For midwives the two primary job satisfaction components are CNM...
interaction with registered nurses and CNM interaction with physicians. Therefore, for this study, the original Stamps and Piedmont scale is modified to contain seven relevant components. While the scale was originally developed to assess nurse job satisfaction, it has been widely adopted by various researchers in the broad field of healthcare (Anderson, 1996).

Forty two items applicable to assessment of the job satisfaction of CNMs were selected from the original survey, which contained forty-four statements. In addition, an overall job satisfaction scale was added. While the particular items selected for this study were considered to be valid and reliable in previous works, they were nevertheless pre-tested in a local health care clinic staffed by CNMs. After several iterations, the scale was again pre-tested on a random sample of 150 CNMs selected from the Directory of Midwives of the American College of Nurse-Midwives. The participants were asked to provide comments relating to the clarity, relevance, and appropriateness of each item. Based on 52 returns, a number of items were reformulated before their inclusion in the final survey. Subsequently, the final survey contained 42 job satisfaction statements and one overall job satisfaction item. The questionnaire used the widely-employed Likert type measurement scale where 1=strongly agree to 7=strongly disagree.

Demographics, such as age, marital status, education level, place of employment, and salary level, often thought to impact job satisfaction were collected. The places of work or employment were categorized as governmental agencies, educational institutions, hospitals, HMOs, physician’s office, private practice, and other. The “other” category included CNMs who function as private contractors and those working in family planning clinics, the armed forces, indigent care facilities, and community health clinics.

Sample
The certified nurse midwives surveyed were members of the American College of Nurse-Midwives. A random sample of 2000 certified nurse midwife names was acquired from this association and the survey was mailed to each. Six hundred and eighty questionnaires were returned, resulting in 537 usable questionnaires. A comparison of the demographic characteristics of the sample with a membership survey indicates that the respondents were representative of ACNM members at large (Schulling, Sipe, & Fullerton, 2005).

Job Satisfaction Factors
A factor analysis of the 537 returns, using varimax rotation with a factor loading of .40 or greater and explaining 55% of the variance, resulted in eight factors rather than seven, as found in the original job satisfaction questionnaire (see the Appendix for a listing of the factors and items in each factor). The eight factors are similar to the original scale and are labeled as satisfaction with physician interaction, with organizational policies, with midwife nurse interaction, with pay, with job autonomy, with professional status, with job requirements, and with physician respect.

In the CNM sample, the interaction with physicians factor from the original survey split into two factors, adding an eighth factor labeled satisfaction with respect of physicians. It is possible that the eighth factor arose due to the re-wording of the statements necessary for the CNM sample. It is also likely that this new factor appeared because CNMs frequently interact with physicians on a consulting basis and sometimes judge this interaction in terms of physician respect. Whatever the reason, this component split into two factors, one for CNM physician interaction and another for physician respect. This is consistent with research in other organizations (Hill & Carley, 2008). It should also be noted that 9 of the 42 job satisfaction items in the original survey were eliminated in the course of the factor analysis.

The means, loadings, and reliability coefficients of these eight factors are set forth in the Appendix. Seven of the eight job satisfaction factors exhibited acceptable reliability coefficients ranging from an alpha of 0.70 to 0.86. Only satisfaction with professional status produced an unacceptable reliability coefficient (.51), and was eliminated from the analysis. The mean scores of each job satisfaction factor are used in regression analysis as independent variables along with the selected demographics of age, marital status, education level, and salary level.

Content validity, exploring whether the scales fit the constructs under examination, appears to be satisfied for this study. This is the case because, first, the scale items selected for study were considered valid and reliable in previous inquiries, and, second, an adoption process with thorough pre-testing was employed to ensure that the original items in the scale fit the CNM sample being surveyed.
**FINDINGS**

**Level of Job Satisfaction for CNMs – Exploring Proposition 1**

The mean for each job satisfaction factor and item are displayed in Table 1 and in the Appendix. The factor mean for satisfaction with nurse interaction is 2.41 — a finding that is consistent with a study of social work professionals (Acquavita, Pittman, & Castellanow-Brow, 2009) — hence, CNMs agree that nurses show them respect and cooperate extensively. Nurses’ respect, appreciation, and understanding of the CNM professional support their willingness to follow orders issued by the CNM.

<table>
<thead>
<tr>
<th># Items</th>
<th>CNM Job Satisfaction Dimensions</th>
<th>Means</th>
<th>Standard Deviation</th>
<th>N</th>
<th>Reliability Coefficients</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Work Satisfaction Dimensions</td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Overall Satisfaction Being a CNM</td>
<td>1.81</td>
<td>1.09</td>
<td>539</td>
<td>n/a</td>
</tr>
<tr>
<td>5</td>
<td>Satisfaction with Nurse Interaction</td>
<td>2.41</td>
<td>1.05</td>
<td>539</td>
<td>0.86</td>
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<tr>
<td>3</td>
<td>Satisfaction with Job Autonomy</td>
<td>2.44</td>
<td>1.11</td>
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<td>0.76</td>
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<td>3</td>
<td>Satisfaction with Physician Interaction</td>
<td>2.78</td>
<td>1.35</td>
<td>539</td>
<td>0.84</td>
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<tr>
<td>5</td>
<td>Satisfaction with Respect of Physicians</td>
<td>3.4</td>
<td>0.85</td>
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<td>0.73</td>
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<td>3</td>
<td>Satisfaction with Organization Policies</td>
<td>3.47</td>
<td>1.56</td>
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<tr>
<td>3</td>
<td>Satisfaction with Job Requirements</td>
<td>3.47</td>
<td>1.56</td>
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<tr>
<td>6</td>
<td>Satisfaction with Pay</td>
<td>4.12</td>
<td>1.29</td>
<td>539</td>
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<td>Sample Demographics</td>
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<td>Age of CNMs</td>
<td>50.8</td>
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<td>Education Level*</td>
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<td>Marital Status**</td>
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<td>Salary Level***</td>
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<td>1.84</td>
<td>539</td>
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</tbody>
</table>

*Note.* *Education level: scaled where 1 = very high level of education (Ph.D.), 2 = high level of education (masters), 3 = moderate level of education (=bachelors), and 4 = lower level of education (less than bachelors).
**Martial Status, dummy variable in the regression analysis is classified as married or not married [Married CNMs = 400; Not Married CNMs = 139].
***Salary scaled for 1 = high (over $90,000) to 9 = low (less than $20,000). A 4.3 Salary Level indicates that the average salary for CNMs is between $40,000 and $50,000 per year.

Satisfaction with job autonomy and physician interactions is 2.44 and 2.78 respectively. In this regard, CNMs appear to see themselves as autonomous professionals making decisions in a reasonably autonomous manner and who are expected by others to operate independently. However, a number of comments in the survey suggest that managed care supervised by doctors may erode CNM independence in the future. Yet, CNMs tend to be satisfied with physician interaction. In this regard, CNMs support teamwork and cooperation with physicians. They also agree that physicians generally understand and appreciate them.

Satisfaction with respect from physicians is 3.40, signifying that CNMs are somewhat satisfied with the respect they receive.
from doctors. Thus, CNMs agree that others appreciate the importance of midwives, but are neutral toward the notion that midwifery is recognized as a profession. They believe that they are not dominated by doctors and agree that physicians exhibit respect for their skills and knowledge. It appears that physicians who employ CNMs and consult with them on a regular basis respect CNMs more than other doctors. Therefore, the rating of this job satisfaction factor may be lower than it might have been if the statements referred solely to physicians who employ CNMs as part of their practice or who consult with them on a regular and ongoing basis.

CNM satisfaction with organizational policies is 3.47. This is consistent with findings on public administration employees (Franklin & Pagan, 2006). CNMs tend to agree that they have sufficient say in developing and implementing policies and procedures, opportunity to participate in decision making, and a voice in planning their workplace. The responses seem to be conditioned by the place of work, as one CNM remarked, “I am in a private OB/GYN practice and we all control our policies and practices. However, if I responded as working in a hospital, the answers would have been just the opposite.”

Satisfaction with job requirements is 4.02 and satisfaction with pay is 4.12. These findings are consistent with those of Kondra & Hurst (2009). Regarding job requirements, CNMs do not agree or disagree about most of the ingredients that make up the job requirement factor. Perhaps the reason for this neutral rating on most items is due to the time commitment required by the job. This sentiment is reflected by one CNM, who indicated that a large negative of the job is the time commitment required.

CNMs’ perspective or attitudes toward satisfaction with pay is interesting. The mean factor rating is neutral, or neither agree or disagree. The respondents tended to agree with the following items: “my present pay is satisfactory”; “considering the job requirements, pay is reasonable”; and compared to other places they might work, “the compensation is fair in their present position.” Conversely, they tend to disagree with the notion that their earnings should be upgraded. Finally, they are ambivalent or neutral about whether other CNMs are satisfied with their compensation.

The mean for overall job satisfaction is 1.81. As a group, certified nurse midwives seem to be highly satisfied with their jobs, providing support for Proposition 1. They are most satisfied with nurse interactions and job autonomy. In addition, they are also quite satisfied with physician interaction. However, they are less well satisfied with respect from physicians and organizational policies. Finally, they are even less satisfied with job requirements and their perceptions of pay. In summary and based on this survey, CNMs are satisfied with their job and view most of its aspects as satisfactory, again lending support for Proposition 1.

The second objective explores the relationship of job satisfaction factors and a limited number of demographics with overall job satisfaction. The results of the association between overall job satisfaction and these independent variables appear in Tables 2 through 9. There are eight regression analyses, one based on the total sample and seven conducted on the places of work or employment.

**Total Sample Analysis – Exploring Proposition 2**

The analysis indicates that the demographics of age, education level, marital status, and salary level are not significantly associated with overall job satisfaction for the total sample. However, for the total sample, five of the seven job dimensions or factors are considered to be significant and positively related to overall job satisfaction (Table 2). They are satisfaction with physician interaction, pay, organizational policies, job requirements, and respect of physicians. The job satisfaction factors not significantly related to overall job satisfaction are nurse interaction and job autonomy. When CNMs are viewed as one group, satisfaction with physician interactions, pay, organizational policies, job requirements, and respect of physicians are the most important job components related to overall satisfaction. It is interesting to note that actual salary level is not significantly related to overall satisfaction with the job, while perceptions of pay are.

**Analysis by Places of Work**

Tables 3 thru 9 reveal that the association between job satisfaction factors and overall job satisfaction varies across workplaces and is different from the total CNM sample. This suggests the need for an analysis of the disaggregated sample to gain a more accurate picture and understanding of CNM job satisfaction.
Table 2
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of all CNMs

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Satisfaction with Physician Interaction</td>
<td>.22</td>
<td>.00</td>
<td>5.55</td>
<td>.24</td>
</tr>
<tr>
<td>Satisfaction with Pay</td>
<td>.20</td>
<td>.00</td>
<td>5.03</td>
<td>.21</td>
</tr>
<tr>
<td>Satisfaction with Organizational Policies</td>
<td>.16</td>
<td>.00</td>
<td>4.15</td>
<td>.18</td>
</tr>
<tr>
<td>Satisfaction with Job Requirements</td>
<td>.10</td>
<td>.01</td>
<td>2.57</td>
<td>.11</td>
</tr>
<tr>
<td>Satisfaction with Respect of Physicians</td>
<td>.09</td>
<td>.01</td>
<td>2.49</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note. N = 537. Sig F = .01. R square = .15. Mean of overall job satisfaction = 1.81. When CNMs are viewed as one group, satisfaction with physician interactions, pay, organizational policies, job requirements, and respect of physicians are the most important job components related to overall satisfaction.

Government Agencies (Table 3) and Educational Institutions (Table 4). For those CNMs who are employed by government agencies, the only variable associated with overall job satisfaction is salary level. The $R^2$ of .10 indicates that 90% of the variation in overall job satisfaction is not explained by this analysis. For those who are employed by educational organizations, the only significant association with overall job satisfaction is nurse interaction. An $R^2$ of .09 indicates that 91% of the variation in overall job satisfaction is not explained by this analysis. In these two workplaces, the independent variables were not able to account for 90% and 91% of the variation in overall job satisfaction. For educational institutions, it should be noted that important independent variables related to teaching, service, and research were not part of the job satisfaction measure, and these may be the major sources of CNM professors’ job satisfaction. Further, in government agencies, variables related to job continuity, stability, retirement and benefits, and security were not included and may have substantial impact on CNM overall job satisfaction. However, some CNM educators and those working for the government may not view themselves primarily as CNMs, but more as professors and bureaucrats. Hence, a different study would be required to explore their job satisfaction.

Hospitals (Table 5). CNMs employed by hospitals view satisfaction with physician interaction, job requirements, salary level, and organizational policies as positively associated with overall job satisfaction. The $R^2$ indicates that 19% of the variation in overall job satisfaction is explained by this analysis. The order of the variables’ entry into the regression appears in Table 2. The partial correlation coefficients indicate that the variable with the greatest effect is satisfaction with job requirements (.25), followed closely by salary level (.23), satisfaction with physician interaction (.22), and organizational policies (.20). These findings suggest that various aspects of the job controlled by the hospital, such as job requirements, organization policies, and salary levels related positively with CNM job satisfaction. CNMs should be encouraged and allowed to participate in establishing such policies and job requirements. Further, increases in salary and better physician cooperation and support should enhance overall job satisfaction.

Physician’s Office (Table 6). Those employed by physicians perceive satisfaction with physician interaction and financial reimbursement to be positively associated with overall job satisfaction. It is interesting to note that CNMs working in a doctor’s office have the highest overall job satisfaction rating (1.63). However, CNMs’ overall job satisfaction is rated rather high across other places of work, ranging from 1.63 in physicians’ offices to 1.97 in other areas of work. With an $R^2$ of .27 the analysis explains 27% of the variation in overall job satisfaction. Partial correlation analysis indicates that the variable with the greatest effect is satisfaction with pay (.47), followed by satisfaction with physician interaction (.24). It appears that improvement in remuneration should increase and maintain high levels of job satisfaction of CNMs working in physicians’ offices.

HMOs (Table 7). CNMs employed by HMOs see satisfaction with nurse interaction, organizational policies, and pay to be positively associated with overall job satisfaction. The $R^2$ of .50 explains 50% of the variation in overall job
satisfaction. The partial correlation coefficients indicate that satisfaction with nurse interaction has the largest effect (.61), followed by satisfaction with organizational policies (.39) and pay (.36).

Private Practice (Table 8). CNMs in private practice regard satisfaction with job autonomy and pay as the only independent variables significantly associated with overall job satisfaction. In this case, the $R^2$ is .29, indicating that 29% of the variation in overall job satisfaction is explained. Partial correlation analysis indicates that the variable satisfaction with job autonomy has the most potent effect (.46), followed by satisfaction with pay. It appears that CNMs who establish their own practice do so to ensure job autonomy and control over their income, which enhances overall job satisfaction. Since only two variables enter the analysis, and the $R^2$ was only .29, there are probably other variables, such as the satisfaction of being an independent health supplier and managing your own clinic, that are related to job satisfaction.

Other Areas of Work (Table 9). Comments by CNMs in this group indicate they work in a variety of places such as indigent care clinics, family planning centers, and community health clinics that are sponsored by a host of private, public, and religious organizations. This category includes CNMs that function as part-time or full-time contractors. These CNMs believe that physician interaction and job autonomy are associated with overall job satisfaction. The regression analysis by CNMs who are employed in other places of work indicates an $R^2$ equal to .16. The partial correlations indicate that both of the two independent variables have an almost equal impact on overall job satisfaction.

**Table 3**
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by the Government

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with salary level</td>
<td>.31</td>
<td>.05</td>
<td>2.04</td>
<td>.31</td>
</tr>
</tbody>
</table>

Note. $N = 41$. Sig F = .05. $R$ square = .10. Mean of overall job satisfaction = 1.66.

**Table 4**
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by Educational Organizations

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Satisfaction with Nurse Interaction</td>
<td>.29</td>
<td>.04</td>
<td>2.13</td>
<td>.29</td>
</tr>
</tbody>
</table>

### Table 5
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Hospitals

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Physician Interaction</td>
<td>.20</td>
<td>.00</td>
<td>2.73</td>
<td>.22</td>
</tr>
<tr>
<td>Satisfaction with Job Requirements</td>
<td>.23</td>
<td>.00</td>
<td>3.19</td>
<td>.25</td>
</tr>
<tr>
<td>Satisfaction with Salary Level</td>
<td>.12</td>
<td>.00</td>
<td>2.87</td>
<td>.23</td>
</tr>
<tr>
<td>Satisfaction with Organizational Policies</td>
<td>.18</td>
<td>.022</td>
<td>2.50</td>
<td>.20</td>
</tr>
</tbody>
</table>

*Note.* N = 159. Sig F = .02. R square = .19. Mean of overall job satisfaction = 1.95

### Table 6
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Physician Offices

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Satisfaction with Pay</td>
<td>.45</td>
<td>.00</td>
<td>5.89</td>
<td>.47</td>
</tr>
<tr>
<td>Satisfaction with Physician Interaction</td>
<td>.21</td>
<td>.01</td>
<td>2.70</td>
<td>.24</td>
</tr>
<tr>
<td>Satisfaction with Salary Level</td>
<td>.12</td>
<td>.00</td>
<td>2.87</td>
<td>.23</td>
</tr>
<tr>
<td>Satisfaction with Organizational Policies</td>
<td>.18</td>
<td>.02</td>
<td>2.50</td>
<td>.20</td>
</tr>
</tbody>
</table>

*Note.* N = 128. Sig F = .01. R square = .27. Mean of overall job satisfaction = 1.63

### Table 7
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by HMOs

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Satisfaction with Nurse Interaction</td>
<td>.55</td>
<td>.00</td>
<td>4.66</td>
<td>.61</td>
</tr>
<tr>
<td>Satisfaction with Organizational Policies</td>
<td>.30</td>
<td>.02</td>
<td>2.54</td>
<td>.39</td>
</tr>
<tr>
<td>Satisfaction with Pay</td>
<td>.27</td>
<td>.03</td>
<td>2.30</td>
<td>.36</td>
</tr>
</tbody>
</table>

*Note.* N = 40. Sig F = .03. R square = .50. Mean of overall job satisfaction = 1.75.
Table 8
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs in Private Practice

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Job Autonomy</td>
<td>.47</td>
<td>.00</td>
<td>3.97</td>
<td>.46</td>
</tr>
<tr>
<td>Satisfaction with Pay</td>
<td>.29</td>
<td>.02</td>
<td>2.43</td>
<td>.26</td>
</tr>
</tbody>
</table>

Note. N = 54. Sig F = .02. R square = .29. Mean of overall job satisfaction = 1.87.

Table 9
Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Other Area

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Physician Interaction</td>
<td>.35</td>
<td>.00</td>
<td>2.91</td>
<td>.35</td>
</tr>
<tr>
<td>Satisfaction with Job Autonomy</td>
<td>.30</td>
<td>.02</td>
<td>2.51</td>
<td>.30</td>
</tr>
</tbody>
</table>


Overall, the preceding analysis provides support for Proposition 2 that certified nurse midwives’ job satisfaction components vary by places of work.

DISCUSSION AND IMPLICATIONS

This study provides insights into some of the factors that have an important effect in explaining the variation in overall job satisfaction of certified nurse midwives. One noteworthy finding is that the factors related to CNM overall job satisfaction are conditioned by their place of work or employment. An important implication is that healthcare managers and administrators need to realize that job satisfaction for CNMs is workplace specific and not generic. While levels of overall job satisfaction are high for CNMs, the factors associated with it vary by workplace. Therefore, strategies designed to enhance job satisfaction for CNMs must be related to the locus of work and its environment. Consistent with other research, a number of demographics, such as education level, marital status, and age, are not linked to overall job satisfaction (Collins, 1990). Also, and most interesting, is the notion that job autonomy, which is often viewed as defining the basis for work and enhancing the professional worth for nurse practitioners like the CNM, is not strongly supported by the findings of this study (Bruch & Capezuit, 1997). Only CNMs who are employed in a private practice view job autonomy as related to overall job satisfaction.

Another meaningful finding is that CNMs are highly satisfied with their jobs regardless of their place of work. However, those factors that affect overall satisfaction depend on the place of employment. CNMs working for a government agency view salary level as the only significant variable (of those examined in this study), while those employed by educational institutions view only nurse interaction as significant. Organization policies are important job features related to overall satisfaction when considering the total CNM sample. However, organization policies are only important for those who are employed by hospitals and HMOs. Physician respect is significantly associated with overall job satisfaction when one considers the total sample, but is not so associated when the analysis is conducted on the disaggregated sample by place of work. Items on the satisfaction with organizational policies are common features or concerns in large organization like hospitals and HMOs and are likely to impact job satisfaction of those who work there. However, they are of minor concern in smaller organizations, such as a doctor’s office.
It was disclosed that satisfaction with pay is significantly associated with overall job satisfaction for those CNMs working in private practice, physicians’ offices, and HMOs, while actual salary level is related to overall job satisfaction for CNMs working for the government and in hospitals. Since pay and salary level are positively related to overall job satisfaction to those working in government agencies, hospitals, HMOs, physicians’ offices and private practices, a salary increase could increase job satisfaction.

Physician interaction is significantly related to overall job satisfaction for CNMs employed in hospitals, their offices, and other places of work. Nurse interaction is significantly correlated with CNM job satisfaction for those in the work forces of educational organizations and HMOs. In turn, pay and salary levels are associated with job satisfaction for CNMs in government agencies and hospitals. Further, organizational policies are associated with overall job satisfaction for CNMs in hospitals and HMOs. This suggests, at least for a majority of certified nurse midwives, that as long as they can function in a collaborative fashion with physicians and nurses at reasonable rates of financial remuneration in an environment of supportive organizational policies, they are likely to be satisfied overall with their jobs. These findings may reflect the realities of the new health care environment in which CNMs find themselves.

While this study employed a large random sample, it was limited to CNMs in the USA. Another limitation or area of concern is the amount of dependent variable variation not explained. In this study, the independent variables were not able to account for 50% to 91% of the variation across places of employment. The survey was adapted from one designed to measure nurse job satisfaction and was thoroughly pretested. However, several potentially relevant variables were excluded from the present analysis. These variables are related to professionalism, rewards other than money, and selected workplace variables. In future studies, there is a need to develop and include measures of job satisfaction which include these and other workplace-specific variables.

REFERENCES


Gerald M. Hampton (ghampton@nmsu.edu) and Robin T. Peterson (ropeters@nmsu.edu) are professors of marketing in the College of Business at New Mexico Business, Las Cruces, New Mexico. The research was supported in part by a grant from The College of Business at New Mexico State University.
## APPENDIX

### FACTOR ANALYSIS RESULTS—JOB SATISFACTION DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension 1 - Satisfaction with Physician Interaction</th>
<th>Mean</th>
<th>Factor Loading</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is a lot of teamwork between midwives and physicians in my unit.</td>
<td>2.79</td>
<td>.82</td>
<td>.84</td>
</tr>
<tr>
<td>2. Physicians in general cooperate with midwives where I work.</td>
<td>2.48</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>3. Physicians where I work generally understand and appreciate what midwives do.</td>
<td>3.07</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Mean: Physician Interaction</td>
<td>2.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension 2 - Satisfaction with Organizational Policies</th>
<th>Mean</th>
<th>Factor Loading</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have sufficient say in policies and procedures that impact my work.</td>
<td>3.28</td>
<td>.68</td>
<td>.85</td>
</tr>
<tr>
<td>2. Where I work, there is ample opportunity for midwives to participate in administrative decision making.</td>
<td>3.74</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>3. I have all the voice in planning and procedures where I work that I want.</td>
<td>3.41</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Mean: Organization Policies</td>
<td>3.47</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension 3 - Satisfaction with Midwife-Nurse Interaction</th>
<th>Mean</th>
<th>Factor Loading</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nurses show a great deal of respect for midwives.</td>
<td>2.81</td>
<td>.78</td>
<td>.86</td>
</tr>
<tr>
<td>2. Nurses understand and appreciate what midwives do.</td>
<td>2.40</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>3. There is a good deal of teamwork and cooperation between nurses and midwives where I practice.</td>
<td>2.39</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>4. There is a lot of cooperation with nurses.</td>
<td>2.29</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>5. Nurses in my organization do not hesitate to follow my orders.</td>
<td>2.16</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>Mean: Nurse-Midwife Interaction</td>
<td>2.41</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension 4 - Satisfaction with Pay</th>
<th>Mean</th>
<th>Factor Loading</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My present pay is satisfactory.</td>
<td>3.28</td>
<td>.87</td>
<td>.86</td>
</tr>
<tr>
<td>2. Considering what is expected of me, the pay is fair.</td>
<td>3.63</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>3. Compared to others, the pay is fair where I work.</td>
<td>3.32</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>4. My impression is many midwives are satisfied with their pay.</td>
<td>4.47</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>5. An upgrading of midwife pay schedules is needed.</td>
<td>5.35</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>6. The rate of increase in pay for midwives is satisfactory.</td>
<td>4.66</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Mean: Pay</td>
<td>4.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dimension 5 - Satisfaction with Respect of Physicians  
1. I feel dominated by doctors 2.95 .48
2. Midwifery is recognized as a profession. 4.02 .48
3. Most doctors respect midwives. 3.83 .51
4. Most people appreciate the importance of midwives. 2.76 .41
5. Physicians show respect for skill & knowledge of midwives. 3.44 .41

Mean: Physician Respect 3.40

Dimension 6 - Job Autonomy  
1. We do not have close supervision. 2.74 .70
2. I make most of my own decisions regarding work. 2.34 .48
3. Independence is permitted if not required where I work. 2.23 .60

Mean: Job Autonomy 2.44

Dimension 7 - Satisfaction with the Job Requirements  
1. I have sufficient time to be with each patient. 2.61 .62
2. I have time to do a good job with each patient. 4.18 .61
3. Administrative decisions support patient care. 4.40 .41
4. Paper work does not interfere with patient care. 3.81 .45
5. My activities are of my own making. 5.09 .40
6. I have time for each patient to deliver excellent care. 4.00 .78

Mean: Job Requirements 4.02

Dimension 8 - Satisfaction with Professional Status  
1. It makes me proud to tell other about my job as a CNM. 1.44 .74
2. There is no doubt what I do is really important. 1.45 .46
3. If I had to do it over, I would become a midwife. 1.87 .53

Mean: Professional Status 1.59

Overall Job Satisfaction 1.81

Note. All job satisfaction statements and the overall job satisfaction item were measured on a scale where 1 = strongly agree to 7 = strongly disagree.
A LONGITUDINAL EXAMINATION OF THE RELATIONSHIP OF SELECTED INSTITUTIONAL VARIABLES TO COMMUNITY COLLEGE FOUNDATION REVENUE

Van Patterson  
Panola College

Madeline Justice  
Texas A&M University – Commerce

Joyce A. Scott  
Texas A&M University – Commerce

The primary purpose of this study was to examine the annual revenue received by United States public Community College Foundations from 2008-2009 in relation to selected variables associated in the literature with successful foundation performance. This study also collected longitudinal data by replicating and expanding upon a similar study conducted by Dr. Sharon McEntee Carrier a decade earlier.

Linear regression analysis was used to collect descriptive statistics that described the frequencies, central tendencies, and distribution of the data. The researchers used linear regression and analysis of variances (ANOVA) to study the relationship between revenue gained in connection with private giving and college foundation operations for fiscal year 2008-2009, the degree to which the college president, chief resource development officer, and foundation board members were rated as playing a critical role in the foundation's operation, the degree to which meeting institutional strategic goals was rated as an important factor in evaluating the foundation's operation, the institution's geographic location, size (based on FTE enrollment), size of endowment, and organizational structure.

The explanatory variables, foundation operations, the Chief Development Officer’s role in the foundation's operation, location, size, endowment, and the Chief Development Officer’s perception of how fundraising efforts were appreciated by the institutions served were found to be statistically significant.

Keywords: chief resource development officer (CDO), college fund raising, college foundations, endowments, community college revenue

The dismal economic climate of the latter part of the first decade of the 21st century has influenced thousands of people to attend college (Community College Enrollment, 2008; Nevada, 2009). They seek educational programs that will quickly provide them with the training necessary for a rapid and profitable return to the workforce. Many decide to enroll at a local community college primarily because of its affordability when compared to 4-year institutions, the quality of instruction, and the ability of community colleges to provide specific training sought by local employers (Jacobson, 2005; Washington, 2002).

LITERATURE REVIEW

Public community colleges are the workhorses of American higher education as they educate a majority of students enrolled. From 2000 to 2008, enrollment at these institutions increased 17%, from 5.7 to 6.6 million students or approximately 95% of all students in 2-year institutions. From 2000 to 2008, full-time enrollment at public and private
2-year institutions increased to 2.8 million students, while part-time enrollment increased 11% to 4.1 million students (United States Department of Education [USDE], 2010).

Community colleges have grown faster than 4-year institutions, with the number of students they educate increasing more than a sevenfold rate of growth since 1963, compared to a threefold growth rate at 4-year institutions, but funding for community colleges has steadily declined over the past 20 years (Fitzpatrick, 2009). Community colleges have traditionally relied on three funding sources: state appropriations, local taxes, and tuition. Each source supplied approximately one-third of the school’s total budget. Over the years, these funding sources have declined radically, particularly in the area of state appropriations (Matonak, 2008). As states struggle to create balanced budgets, many are choosing to accomplish their goals by severely reducing funding for institutions of higher education.

This trend has led more than one college president to agree that community colleges will soon need to call themselves publicly-assisted instead of publicly-supported institutions due to declining financial support from traditional state and local sources (Milliron, de los Santos & Browning, 2003). While humorous, this comment illustrates the frustration community college presidents experience each time state legislatures reject their requests for additional funding.

Recently, two issues have dominated state appropriations for higher education: the decline in the percentage of state budgets spent on higher education, and the changes in higher education spending directly linked to a state’s economic circumstances (Hovey, 2001). In the early 1990s, 12% to 15% of all state appropriations went to higher education nationally. However, by mid-decade, appropriations had declined to approximately 8% to 11% (Carrier, 2002). This problem was compounded as federal, state, and local government appropriations declined by 5.7% (Watkins, 2000) in the same period.

Colleges are responding to growing costs by establishing 501(c)(3) nonprofit foundations to receive donations from alumni, donors, and other philanthropic agencies (Cohen & Brawer, 2002; Eldredge, 1999; Jenkins & Glass, 1999; Ryan, 2003; Tisdale, 2003). Before the late 1970s, one did not typically see foundations on community college campuses, but by the end of the 1980s the number of Community College Foundations had grown to approximately 649 (Angel & Gares, 1989).

Community College Foundations help their institutions raise additional funds and increase volunteer involvement, yielding additional flexibility in administrative and investment decisions (Carrier, 2002). Funds raised typically supplement operating budgets, but some community colleges have begun to build endowments (Moore, 2000; Van der Werf, 1999).

Over the last decade, almost every community college in America has become a fundraiser (Jenkins, 1997; Van der Werf, 1999). Ed Coulter, chancellor of Arkansas State University–Mountain Home, summarized the situation well when he stated that 2-year institutions are not where they should be in regard to establishing successful development programs. As a result, these institutions as a group have received less than 2% of all funds given to higher education (Anderson, 2003; Fund Raising, 2008; Lanning, 2008; Summers, 2006). Faced with increasing costs, declining government support, and pressure to increase tuition, community colleges have realized the importance of fundraising to their future (Chitwood & Okaloosa-Walton Community College, 1990; Fund Raising, 2008).

As Community College Foundations gain experience in fundraising, they enjoy greater success (Weiger, 1999). For example, Honolulu Community College received an estate gift of $3.5 million, and Santa Fe Community College received $259,000 from individual donors in 2007 (Halligan, 2008). Similarly, Panola College in Carthage, Texas also received a single-donor gift of $251,500. No matter their size, foundations are important to the institutions they serve and will continue to grow as community colleges seek creative ways to counter the negative economic climate (Anderson, 2003; Council for Advancement and Support of Education [CASE], 2007).

As Community College Foundations mature and meet with greater success, they are the subject of more and more research studies. This expanding base of knowledge is beneficial to foundation directors, but there is still only a limited amount of longitudinal research pertaining to Community College Foundations (Anderson, 2003; Stewart, 2006). A review of the literature confirmed that few researchers have revisited previous studies, so little new information is available to confirm their results. Variables found to increase foundation revenue a decade ago may no longer be...
effective, while those determined to have been statistically insignificant at the time may have a much greater impact on today’s Community College Foundations.

Researchers contacted the Council for Resource Development (CRD) to discuss the present project. CRD Executive Director suggested that researchers replicate all or a portion of a study completed by Sharon M. Carrier, Barbara J. Keener, and Sherry J. Meaders in 2002. Their research was considered groundbreaking at the time because it illustrated how community colleges from across the nation implemented the principles of resource development. It provided longitudinal data, indicators of successful Community College Foundations, and a snapshot of how maturing programs were funded, staffed, and operated in their fundraising efforts. The project supplied longitudinal data to enable directors and foundation board members to make better-informed decisions as they competed for public support.

The Carrier study (2002) was the first to examine the annual revenue of United States public Community College Foundations in relation to selected variables associated in the literature with successful foundation performance. The present study was designed to replicate and expand upon the Carrier study, to look at new longitudinal data and determine if the significance of the variables established a decade earlier had changed in relation to annual revenue.

This study examined the following research questions:

1. Does the size of a foundation’s operating budget significantly influence its ability to raise revenue?
2. Does the degree to which the college president is ranked as playing a critical role in the foundation’s operation significantly influence a Community College Foundation’s ability to raise revenue?
3. Does the degree to which the chief resource development officer is ranked as playing a critical role in the foundation’s operation significantly influence a Community College Foundation’s ability to raise revenue?
4. Does the degree to which the foundation board members are ranked as playing a critical role in the foundation’s operation significantly influence a Community College Foundation’s ability to raise revenue?
5. Does the degree to which meeting institutional strategic goals is ranked as an important factor in evaluating the foundation’s operation significantly influence a Community College Foundation’s ability to raise revenue?
6. Does an institution’s geographic location significantly influence its foundation’s ability to raise revenue?
7. Does a college’s size significantly influence its foundation’s ability to raise revenue?
8. Does the size of a foundation’s endowment significantly influence its ability to raise revenue?
9. Does a foundation’s organizational structure significantly influence its ability to raise revenue?

**METHOD OF PROCEDURE**

In addition to examining the annual revenue received by United States public Community College Foundations from 2008-2009, the researchers examined additional variables in relation to revenue earned, including the degree to which meeting institutional strategic goals was rated as an important factor in evaluating the foundation operation. Other variables included a college’s geographic location, size, endowment, and its foundation’s organizational structure. Researchers used a modified and expanded version of Carrier’s original survey.

**Survey Validation**

This was only the second time the survey instrument was used. The original survey was developed by a research team at the University of Florida in the 1990s. It was created following an extensive review of the relevant literature. Its format was similar to that used by the Council for Aid to Education (CAE) in its annual survey (Carrier, 2002). However, major revisions were made to adapt the CAE survey to accommodate the day-to-day realities experienced by development officers operating Community College Foundations, as described by community college fundraising experts and the literature (Carrier, 2002).
To validate the survey instrument, the research team at the University of Florida consulted 10 content experts, most of whom were members of the Council for Resource Development (CRD) Executive Board. These experts provided external validation reviewing the original survey instrument and providing extensive feedback which was incorporated into a revised draft (Carrier, 2002). A second panel of nine experts drawn primarily from the CRD Board provided further external validation.

Sample Selection

Subjects were Community College Foundation directors, whose institutions were members of the Council for Resource Development (CRD) from 2008-2010. The CRD web site indicated that the organization had approximately 1,100 members, each of whom were 18 years of age or older and who met the requirements of this study.

The Council for Resource Development (CRD) is an essential education and networking organization created to benefit community college development professionals through networking, supporting, and celebrating community college development professionals. The CRD is an affiliate of the American Association of Community Colleges (AACC) and serves over 1,600 members at more than 700 institutions.

Collection of Data

CRD sent an email to its members encouraging them to participate in the study. The survey was created using the website Survey Monkey, an online tool that allows researchers to create web-based surveys, collect responses, and examine data in an efficient manner. Researchers can choose to collect information in various formats, and once the data have been collected, they can be exported in Excel format for further analysis.

A computer program called G*Power was used to determine the minimum number of surveys necessary to conduct the study. Utilizing these settings, the G*Power program recommended a minimum of 114 completed surveys be collected to ensure the likelihood of finding statistical significance if it actually existed. Once the minimum number of surveys was received, the data were downloaded and entered into a Statistical Package for the Social Sciences (SPSS) spreadsheet.

Treatment of Data

Following collection of the data, responses to the Community College External Funding Survey were coded and analyzed. A linear regression analysis was used to test the hypotheses at the .05 level of significance to determine the degree of association between the dependent variable, the amount of foundation revenue gained in 2008-09, and the independent variables: foundation operating budget, the degree to which the college president, chief development officer, and foundation board members individually are rated as playing a critical role in the foundation operation; the degree to which meeting institutional strategic goals is rated as an important factor in evaluating foundation operation, college geographic location, college size, college endowment size, and organizational structure. In addition the researchers used analysis of variances (ANOVA) to study the relationship between revenue gained and variables in connection with foundation operations for fiscal year 2008-2009.

FINDINGS

The study sought input from 408 chief development officers (CDO). Of those invited to participate in the survey, 213 (52.2%) accessed the survey. Ninety-eight provided little or no information, while 115 respondents completed the survey. Community College Foundations from 41 states were represented in the study, and Table 1 shows additional information about respondents.

Asked to identify the geographic setting of the institution, 53.8% of CDOs indicated their institutions were located in a rural setting, and 24.2% reported their institutions were in suburban locations. The remaining colleges, 22.0%, were located in an urban environment.

A total of 131 CDOs also responded to the question asking about the perceived wealth of their college's service area. Of those, 6.1% indicated that their colleges were located in a wealthy service area; 44.3% described their service area as being of average wealth, and 49.6% reported their service area as being of below average wealth.
To whom the CDO reported varied by institution. The 128 responses received showed that most CDOs reported to a Chancellor (6.3%) or President (85%) of their institution, whereas the remainder reported to a provost (0.80%), vice president (6.3%), dean (0.80%), executive director (0.80%), or foundation board (2.36%). The total of these percentages exceeds 100% because several of the CDOs (3.15%) responded that they reported to more than one supervisor. When asked about their place in the college’s hierarchy, 81.5% of the 130 CDOs indicated that their position was at the senior or cabinet level. This is encouraging, as a review of the literature showed that CDOs who had direct access to information and decision makers were better prepared to perform their duties (Anderson, 2003; Brumbach & Council for Resource Development [CRD], 2006; Budd, 2008; Fund Raising, 2008; Sygielski & Carter, 2009).

Researchers were surprised to find that almost 20% of participating development officers were not members of their institution’s executive committee. Researchers also discovered that 3.8% of responding institutions did not have a foundation or private gift development office and that 5.5% of the study CDOs were not part of their college’s foundation team.

Chief development officers (CDO) face many challenges, from working with the president and foundation board, to completing additional assigned duties and being evaluated by outside constituencies. However, when asked what were the most important factors in evaluating a Community College Foundation’s operations, as a group they ranked the “Number of repeat donors,” an “Increase in individual giving,” and “Total dollars raised” as the most important.

For this study, the research questions were analyzed in the format of hypotheses to get a better picture of fund raising activities. Hypothesis numbers cited below align with the order of the research questions.

**Hypothesis 1** proposed that there was no significant difference in foundation revenue and the size of its operating budget. The data indicated that the size of a foundation’s operating budget influenced its ability to raise revenue. The hypothesis was rejected.

**Hypothesis 2** analyzed whether there was a significant difference between foundation revenue and the degree to which the college president was ranked as playing a critical role in the institution’s foundation operation. The data indicated that there was no statistical difference between the degree to which the college president was rated concerning his or her role in the foundation’s operation and the Community College Foundation’s ability to raise revenue. The hypothesis was not rejected.

**Hypothesis 3** analyzed whether there was a significant difference between foundation revenue and the degree to which the chief development officer (CDO) was ranked as playing a critical role in the institution’s foundation operation. At the .05 level of significance, a statistically significant difference was found between the degree to which the CDO was ranked as playing a critical role in the foundation’s operation and foundation revenue, and the hypothesis was rejected.

**Hypothesis 4** proposed that there was a significant difference between foundation revenue and the degree to which the foundation Board members were individually ranked as playing a critical role in the institution’s foundation operation. Hypothesis 4 was not rejected.

**Hypothesis 5** analyzed whether there was a significant difference between foundation revenue and the degree to which CDOs ranked meeting institutional strategic goals as an important factor in evaluating the institution’s foundation operation. Hypothesis 5 was not rejected, based on these findings.

**Hypothesis 6** analyzed whether there was a significant difference between foundation revenue and the college’s geographic location. The data indicated that there was statistical difference between a college’s geographic location and the foundation’s ability to raise revenue. Hypothesis 6 was rejected, based on these findings.

**Hypothesis 7** analyzed whether there was a significant difference between foundation revenue and a college’s size based on FTE enrollment. Hypothesis 7 was rejected, indicating that there was statistical difference between a college’s size and its foundation’s ability to raise revenue.

**Hypothesis 8** analyzed whether there was a significant difference between foundation revenue and the size of a community college’s endowment(s). Hypothesis 8 was rejected, indicating that the size of a foundation’s endowment...
influenced its ability to raise revenue.

**Hypothesis 9** proposed whether there was a significant difference between foundation revenue and a Chief Development Officer’s (CDO) perception about how his or her efforts were appreciated by the institution he or she serves. Hypothesis 9 was rejected, indicating that there was a statistical difference between the foundation’s ability to raise revenue and a CDO’s perception of how his or her efforts were appreciated by the college they served.

**CONCLUSIONS AND DISCUSSION**

There are many variables that influence a Community College Foundation’s ability to raise funds. Each variable determined to be statistically significant in this study should be considered in the context of how it affects the foundation as a whole. The following discussion first addresses variables found to be significant and positive in this context and then proceeds to examine those that were not.

The variable *operating budget* is a good example. This study revealed a significant and positive relationship between a foundation’s operating budget and its revenue. This finding reinforced existing studies and research (Anderson, 2003; Berry, 2005; Errett, 2004).

Of the 117 respondents to this question, 70.1% reported an operating budget of $500,000 or less; of these, six reported an operating budget of zero. This percentage is much smaller than that Carrier reported from her 1998 study when 92% of respondents noted a foundation operating budget of less than $500,000 (Carrier, 2002). This smaller percentage of foundations operating on budgets of $500,000 or less indicates that more community colleges have chosen to invest more resources in their fundraising operations.

The mean operating budget in this study was found to be $521,256.74, which is more than twice the average operating budget of $232,479.08 reported by Carrier a decade earlier. Data also showed that 28.2% of Community College Foundations now operate on budgets in excess of $500,000, while 15.4% have operating budgets between $500,001 and $1,000,000, 9.4% have operating budgets between $1,000,001 and $2,000,000, and 3.4% have budgets between 2 and 5 million. An exceptional two institutions (1.7%) reported budgets in excess of $10,000,000.

Carrier’s review of the literature convinced her that a foundation’s operating budget would have a significant and positive influence on foundation revenue. Unfortunately, her data did not support her belief, so she theorized that the many ways a Community College Foundation could be funded and respondent confusion about what information was being sought may have affected the survey outcomes (Carrier, 2002). To reduce confusion, the present researchers added instructions to the survey so respondents would have a clearer idea of what information was being sought, which may explain why this variable emerged as significant in this study but not in Carrier’s.

These findings support the contention that if community colleges are going to raise private donations successfully, they must make investments in fundraising comparable to those made by 4-year institutions decades earlier (Summers, 2006). College leadership must properly fund the institution’s development office (Duronio & Loessin, 1991; M. T. Miller, 1991; Sygielski & Carter, 2009). To choose otherwise is extremely shortsighted as it limits the overall resources an institution can generate (Wisdom, 1989).

The next variable found to be significantly and positively related to foundation revenue was how the chief development officer (CDO) rated his or her role in the foundation’s operation. The average response for the CDO was 1.19, suggesting that most respondents considered their role to be very critical or critical. These findings reinforce the literature on the importance of having a well-qualified and experienced, full-time chief development officer on staff (Anderson, 2003; Fisher, 1989a; Ryan, 1989; Sygielski & Carter, 2009; Wong, 2007).

If community colleges are to have successful development programs, they must hire development officers who are responsible for soliciting donations. Whether full- or part-time, these individuals must be given the tools and support staff they need to do their job.

Care must also be taken not to overload development officers with additional duties. A majority of survey respondents (56.4%) indicated that they “strongly agreed” or “agreed” that “The chief development officer is over burdened with other institutional work.” Only 22.2% of the sample disagreed with the question, while 18.8% were undecided.
Additional duties prove a distraction from a development officer’s fundraising responsibilities, thereby diminishing his or her effectiveness. Alternatively, the CDO may pursue these extra duties because they are easier than raising money. Ultimately the college will suffer because seeking private donations will become a low priority for the development officer.

Another variable found to be significantly and positively related to foundation revenue was a college’s geographic location. Community College Foundations in urban locations raised, on average, more money than those in either suburban or rural settings. Data also showed that foundations in rural locations out-performed foundations in suburban locations, which supports previous studies indicating that a college’s geographic location may influence its foundation’s ability to raise money (Fife, 2004; Jenkins, 1997; Jenkins & Glass, 1999; Meaders, 2002).

A college’s size was also shown to be significantly and positively related to foundation revenue. This finding supports the contention put forth by Carrier (2002) and other researchers that foundations at larger community colleges raised more money than those at smaller colleges (Fife, 2004; Phillippe & Eblinger, 1998). Utilizing the Katsinas typology, 7 colleges in this study were designated as small, 31 medium, and 81 large. On average, the small community colleges raised $662,036, medium colleges raised $689,512, and large schools raised $1,954,029.

There was a significant and positive relationship between endowment size and foundation revenue. This finding reinforces those of other researchers (Carrier, 2002; Weir, 2002). The average endowment of the colleges participating in this study was $6,895,231 (See Table 2) or more than triple the average endowment of $2,220,437 discovered by Carrier just a decade earlier. Carrier arrived at her figure after reviewing data submitted by 310 institutions.

Chief development officers (CDO) from 107 foundations submitted total earned income from endowed interest/investments for 2008-2009. Of those, 1 foundation reported that the information was not yet available; 6 reported a balance of $0; and 66 foundations showed a combined positive balance of $32,211,467. The average income for these foundations totaled $488,053. Unfortunately the remaining 34 foundations lost substantially, with a combined total of -$41,887,851 and an average loss for each foundation of -$1,308,995. Two foundations simply responded “negative” to this question, so the data represent the combined and average loses of 32 foundations. Endowment income for all community colleges participating in this study showed a net loss of -$9,676,384.

In addition to replicating a portion of Carrier’s study, the researchers sought to determine if a foundation’s ability to raise funds was influenced by how it was organized. A review of the literature revealed limited relevant information. Questions were derived from a “board audit” created by John Joslin, a Certified Fund Raising Executive (CFRE) and Senior Consultant for Talisma Fundraising (Formerly Donor2), to examine various characteristics about how Community College Foundations are organized. Due to the volume of data collected about how a foundation’s organizational structure could influence its ability to raise money, the researchers decided to concentrate solely on CDO responses to the statement: “The College Development Officer feels that his or her efforts are appreciated by the institution he or she serves.” An analysis of the data showed a significant and positive relationship between how a development officer perceived his or her efforts were appreciated and foundation revenue. The finding supports previous literature linking this variable to turnover rates and productivity in the advancement area (Fisher, 1989a; Sygielski & Carter, 2009).

A majority of the CDOs (77.8%) either strongly agreed or agreed that their efforts were appreciated by the institution they served. A dozen (10.3%) responded that they were undecided, while 9.4% indicated that they disagreed or strongly disagreed, and 2.6% said the question was not applicable. The researchers found it interesting that almost 20% of respondents were either undecided or convinced that the work they were doing was not appreciated. Some “undecided” or “not applicable” responses may have stemmed from CDOs’ concern about the confidentiality of the data and the dissemination of the final report.

No significant relationship was found to exist between the amount of money raised by a foundation and how CDOs rated the role the college president played in fundraising. This finding emerged despite the fact that respondents believed that the president played a very critical or critical role in the foundation’s operation.

To gather additional detail about the role of the president in fundraising, the researchers added three questions to
1. The college president is engaged in the fundraising process.
2. The college president is familiar with the techniques necessary for soliciting private donations.
3. The college president works in cooperation with the executive director, foundation board members, and volunteers.

CDOs’ responses to questions fell between strongly agree and agree, indicating that even though the statistics did not show a significant relationship between the role of the president and foundation revenue, presidents are making their presence felt. Chief development officers as a group view their presidents’ endeavors to help raise money for the foundation positively. Even though the results of this research question were not found to be statistically significant, the data support the literature on the subject.

No significant relationship was found to exist between the amount of money raised by a foundation and how the chief development officer rated the role of individual foundation board members in raising those funds. This finding contradicted respondents’ belief that foundation board members played a very critical or critical role in the foundation’s operation. This result differs from Carrier’s, which showed a statistically significant relationship between the two variables.

The researchers were disappointed to find no statistical relationship between the role played by individual foundation board members and the revenue raised. The literature reflected general agreement about the importance of board member participation and its impact on the success of the foundation (Broce, 1988; Weir, 2002). The mean score collected from CDO responses totaled (M = 1.17) on a 4-point Likert scale with 1 representing strongly agree and 2 agree. In spite of these numbers and the fact that Carrier’s study found that a significant relationship existed, no similar results were found in this study. This finding led the researchers to postulate that using a Likert scale with a greater range of responses might have produced results similar to Carrier’s.

Community College Foundations exist to strengthen the schools with which they are affiliated. The best way for them to fulfill their purpose is to pursue external funding to assist the college in reaching its strategic goals (Brumbach & Villadsen, 2002; Fund Raising, 2008; Glass & Jackson, 1998b) and, as a group, CDOs agreed. When asked to indicate the importance of meeting institutional strategic goals when evaluating the foundation’s operation, the average response was between very important and important. Although much support was found among CDOs for this variable, no statistically significant relationship was found to exist between this variable and revenue raised.

**IMPLICATIONS**

This study has far-ranging implications for institutional leaders who need to evaluate their fundraising operations for adequacy of staffing and funding. Dr. Andrew Matonak, president of Hudson Valley Community College, believes that “Fundraising is a proportional game” and that the more time and money you put into the effort, the more gifts you can expect to receive (Matonak, 2008).

In this connection, the college president should “audit” the development office to determine how many additional duties have been assigned. It may be that these other tasks are substantially limiting the amount of time the chief development officer (CDO) can devote to his or her primary responsibility, raising money.

If the CDO is a member of the president’s cabinet or executive committee, the president should take steps to ensure that he or she is treated as an equal member of the group. Implementing these steps would go a long way to making sure that CDOs believe their efforts are appreciated by the institutions they serve.

The study also holds implications for the work of the development officer who should seek to strengthen and expand the roles of the president and individual foundation board members in the fundraising effort. In the case of the president, the literature from the past two decades emphasizes that, in fundraising, the president must lead the way. The president’s effectiveness can be enhanced through participation in organizations such as the Council for Resource Development (CRD). Without his or her leadership, direction, and support, the foundation will not be able to reach its full potential.
The chief development officer (CDO) must also ensure his or her own professional development along with that of foundation board members. The CDO must remain up to date on current federal, state, and local government regulations, tax law, and other environmental factors that could negatively affect the foundation. As to Board members, they must be educated concerning their responsibilities, general principles of fund-raising, and giving instruments available through the foundation. They are an important link to the community the college serves and may assist in making fundraising successful.

Finally, the benefits a community college can derive from a substantial endowment fund are numerous, allowing them to offer additional scholarships (Weir, 2002), purchase equipment, or maintain their physical plants. In today’s economic climate, it is imperative that colleges build toward their futures, and with the help of their foundations it is possible to create an endowment to ensure future stability and growth.

**RECOMMENDATION FOR FURTHER RESEARCH**

Based on the findings of this study, the researchers recommend that future studies concentrate on examining the operational budgets of Community College Foundations to determine more precisely how the budget impacts a foundation’s ability to raise money. Results could provide a better understanding of the relationship between these variables. Data collected could serve as benchmarks to illustrate appropriate funding levels for development offices and foundations based on college size, geographic location, or relative wealth of the college’s service area.

Case studies could serve to collect additional information about successful presidents and chief development officers with high performing Community College Foundations in rural, suburban, and urban geographic locations. The presidents’ and CDOs’ assessments of their fundraising strategies and most effective techniques for soliciting private donations could be a valuable resource to leaders at institutions with low-performing operations. Best practices collected from such studies could provide community college presidents and CDOs at similar types of institutions with information they could use to improve their operations.

Finally, additional research needs to be conducted to determine how a foundation’s organizational structure influences its ability to raise revenue. A review of the literature revealed only limited information. A case study of a successful foundation could examine specific aspects of the organization, such as committee structure, board leadership and training, investment policies, or the use of technology and outside consultants. Information collected from such a study could provide benchmarks and additional insights into the workings of a successful Community College Foundation.

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Editors’ Pick—Book Review: *Global Sustainability and the Responsibilities of Universities*

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In May of 1998, a group of academic leaders from Europe and North America convened in Glion, Switzerland, to discuss the future of higher education. At issue were the challenges facing universities as they moved inexorably towards the 21st century in an increasingly globalized and networked world. Led by Professors Luc Weber (University of Geneva) and Werner Hirsch (University of California), the Glion Colloquium's first publication of its conference proceedings, *Challenges Facing Higher Education at the Millennium* (1998), was an attempt to “take stock of its [the university’s] present status, explore the challenges of the future and evaluate promising initiatives to meet these challenges.”

In the past 14 years, the Glion Colloquium has met every two years to publish its findings in a series of works that continues to look to the future and to challenge the notions of how higher education should function in a global environment. Dealing each year with a singular thematic concern ranging from Research, Innovation, Knowledge Economies, and Governance, the Colloquium has established itself as a forum for addressing the major issues confronting higher education in the new millennium. The Colloquium now includes the voices of international business and government agencies from Europe, North America and Asia, as well as other stakeholders.

The eighth title in a series begun in 2001 that focuses particularly on universities, *Global Sustainability and the Responsibilities of Universities* (2012), tackles the hydra-headed topic of global sustainability. Economic models of consumption based on unlimited growth in hand, with a global population that has grown from six billion in 1999, the year of the first Glion Colloquium publication, to seven billion in 2012, is pushing the availability and cost of resources into margins never before seen. Yet editors Professor Weber and Professor James J. Duderstadt (President Emeritus, University of Michigan) seek to expand the concept of sustainability beyond the relatively common notion of “economic development in relation to the environment.” The vision of global sustainability, as cultivated by the book as a whole, is one of practical governance issues in relation to higher education.

In a very real sense, this is not a new argument (the “Ivory Tower” vs. the “Real World”), but what is different is what is at stake—a point is never far from the mind of the numerous scholars who contributed to the research making up the chapters of the book. The contributors assert that the stated missions of many universities must be realigned to produce students and citizens who are aware not only of the global challenges that face them, but of the need for interdisciplinary collaboration in devising solutions. As contributors Winckler and Fieder explain, “As the arising challenges are multidisciplinary, they cannot be the subject of a ‘single’ scientific approach, but will need different contributions from various fields in order to be addressed fully” (p. 197).

The actionable focus of the research presented in *Global Sustainability and the Responsibilities of Universities* is perhaps its strongest suit. In seeking to expand the concept of sustainability to a broader definition that encompasses both a societal and an environmental dimension, the contributors identify multidimensional aspects of the looming crisis and the realms of scholarship that must be linked in order to solve the sustainability issues that confront us. The role of universities from the vantage point of the book is a cross-disciplinary one—humanities and sciences all compris-
ing, as Weber asserts in chapter 1, “key Pillars of global Sustainability”—and should find wide appeal in the disciplines of readers from the realms of humanities, business, law, economics, science, and environmental studies. The tone of the work is reasoned, measured, and articulate, as befits the quality of the writers included in the book. Though the urgency of the authors and editors is disciplined, they issue a clear call to action based on the notion that universities have a distinct role to play in global affairs. As Anne-Marie Leroy, Senior Vice President and General Counsel, World Bank Group, and contributing author asserts, “in order to build sustainable societies, legal scholars and the academic community should be participating more actively in the identification of cutting-edge legal and justice challenges at the country, regional and global levels, respectively, focusing their research at developing creative solutions through inter- and multi-disciplinary approaches” (p. 52). Leroy is echoed by contributors Winckler and Fieder, who explain that “as the arising challenges are multidisciplinary, they cannot be the subject of a ‘single’ scientific approach, but will need different contributions from various fields in order to be addressed fully” (p. 197).

In laying out the book, the editors have followed a model commonly used to study sustainability issues: examine the status quo, identify outcomes, and then look to transitional strategies. Global Sustainability supplies chapters exploring ideas for new curricula in Business Schools focused on sustainability; the need for research paradigms focused on actionable problems of sustainability related to energy, health, or biodiversity; and the necessary engagements and alliances that must be forged if sustainability as a global concern is ever to be meaningfully addressed beyond the walls of classrooms. The twenty-one chapters are organized under the major headings of Elements, Challenges, Innovations, and Engagement, making it easy for a reader to review and select those chapters of most interest and utility, though the content’s accessibility would be improved with the addition of an index.

Global Sustainability does have one more serious fault, however. Given the phenomenal growth of economies in Asia, it is surprising that, with the sole exception of one Japanese researcher and an excellent chapter by M.S. Anarath on the role of the Indian Institute of Technology Madras Research Park, there is a paucity of research from the Pacific Rim or the Economic Tigers of Asia. The organizers of the Colloquium would be well served to include more scholars from a broader global base to enrich and inform the perspective gleaned from those representing Eurocentric economies.

In keeping with core issues of sustainability, six of the seven books published by the Glion Colloquium series, begun in 2001, are available for free on the web through the auspices of the University of Michigan’s open access depository DeepBlue at http://deepblue.lib.umich.edu/. Global Sustainability and the Responsibilities of Universities is an excellent addition to the series underway and a fine example of the type of collaborative work that modern 21st century universities are capable of producing.