

American Institute of Higher Education

Fifth International Conference Proceedings Volume 3, number 2



Orlando, Florida September 29 – October 1, 2010



MESSAGE FROM THE CONFERENCE CHAIR

On behalf of the Conference Organizing Committee, I would like to welcome you to Orlando and to the 5th International Conference of the American Institute of Higher Education (AmHighEd). The conference will provide an opportunity for participants to share their ideas and research in the fields of business and education.

Our previous conferences were quite successful. We received a good deal of constructive and kind feedback from the participants. Participants have benefited from the friendly environment we've created by keeping the number of participants within a certain limit and by continuously incorporating their feedback in designing the conferences. This time around, we have incorporated your workshop proposals as much as we could and hope to receive more proposals for future conferences. The submission and registration processes have also improved, providing submission and payment confirmations upon receipt.

The Best Papers selected in the categories of Business and Education will, after incorporation of reviewers' comments, be published in the American Journal of Business Research and the American Journal of Educational Studies, respectively. In addition, the remainder of the top ten papers will undergo an expedited review process for possible publication in these journals.

We at AmHighEd believe that research is a cooperative enterprise among scholars and practitioners, which is why we are committed to providing a collaborative environment that fosters the free flow of ideas and constructive feedback among researchers, practitioners, and students. We would like to thank all the attendees whose contributions and participation are essential to creating a stimulating environment at the conference.

I would like to take this opportunity to thank the organizing team that did an excellent job of putting this conference together. I am also indebted to our reviewers who reviewed the manuscripts, sometimes under extreme time constraints, and selected the best papers that fit this conference.

We hope you will find the conference productive, informative, and enjoyable. We also wish you a pleasant stay in Orlando and look forward to receiving your constructive comments that would help us in our future planning. Please visit our website (<u>www.amhighed.com</u>) to obtain information of future conferences, journals, webinars, and grant-writing services.

Sincerely,

Alireza Lari Conference Chair American Institute of Higher Education



2010 CONFERENCE OFFICERS AND COMMITTEE

<u>Conference Chair:</u> Alireza Lari, American Institute of Higher Education

Program Chairs:

Nasim Lari, North Carolina State UniversityPooneh Lari, North Carolina State UniversityDothang Truong, American Institute of Higher Education

Proceeding Editor:

Fazlul Miah, American Institute of Higher Education

Organizing Committee:

Arben Asllani, University of Tennessee at Chattanooga
Aaron Clark, North Carolina State University
Alireza Lari, American Institute of Higher Education
Nasim Lari, North Carolina State University
Pooneh Lari, North Carolina State University
Fazlul Miah, American Institute of Higher Education
Dothang Truong, American Institute of Higher Education



TABLE OF CONTENT

IESSA	GE FROM THE CONFERENCE CHAIR	_1 2
	SALARY INVERSION IN BUSINESS SCHOOLS	
	INTERNATIONALIZING HIGHER EDUCATION: ONE DOCTORAL INSTITUTION'S INITIATIVE TO LEARN FROM A TRANS-ATLANTIC IMMERSION SEMINAR	
3.		
4.	DISPELLING THE MYTHS ON BILINGUALISM: EFFECTIVE BILINGUAL EDUCATION MODELS	25
5.	PERCEPTIONS ABOUT SCHOOL AND SCHOOLING:	31
6.	A STUDY OF LATINO/A HIGH SCHOOL STUDENTS IN THE SOUTHERN PART OF THE UNITED STATES	31
7.	THE HACKMAN AND OLDHAM JOB CHARACTERISTICS MODEL: INTERNATIONAL IMPLICATIO	
8.	HI-TECH COMPANY IMAGE: THE CONSTRUCT AND ITS MEASUREMENT	
9.	EEDA: THE IMPLICATIONS FOR THE SIXTEEN TECHNICAL/COMMUNITY COLLEGES IN SOUTH CAROLINA	55
10.	INCREASING RETENTION AMONG PSYCHOLOGY MAJORS: CREATING A BIOECOLOGICAL PROGRAM	64
11.	DOES THIS BOOK MAKE ME LOOK FAT? CREATING POSITIVE IMAGERY WITH GIRLS THROUGH	
12.	CULTURAL INTELLIGENCE – A PREREQUISITE FOR INTERNATIONAL BUSINESS SUCCESS	73
13.	SELF-DIRECTED LEARNING AND THE IMPACT OF LEADERSHIP: ANALYZING KEYS FOR SUCCESS FROM A COVENANTAL PERSPECTIVE	-
14.	A PEDAGOGICAL PRESENTATION OF THE GORDON GROWTH MODEL	79
15.	AN INVESTIGATION OF THE FLORIDA COMPREHENSIVE ASSESSMENT TEST (FCAT) AND THE BLACK MALE ACHIEVEMENT GAP	83
16.	CONTRAST OF THE SCIENCE TEACHING PRACTICES OF TWO PRE-SERVICE EARLY CHILDHOOD EDUCATORS	
17.	THE IMPACT OF HOMELESS ON THE EDUCATION OF CHILDREN FROM 3-1/2 TO AGE SIX	93
18.	A SMALL LOCAL GOVERNMENT: DID MISMANAGEMENT AND MISUSE OF RESOURCES EQUA FRAUD, WASTE OR ABUSE?	
19.	FROM PRESIDENTIAL POLICY TO CLASSROOM REALITY: THE INDELIBLE IMPACT OF ESEA	99
20.	I SEE YOU, YOU SEE ME: OPENING THE DOOR FOR MUTUAL EFFICACY IN HIGHER EDUCATION	
21.		109



22.	WORK ENGAGEMENT	1
	CONTINGENT CLAIM VALUATION – THE CASE OF CERTIFICATES PLUS RELOADED	
24.	THE ACHIEVEMENT GAP: TRENDS IN THE GAP OVER THE PAST 30 YEARS	1
	THE ACHIEVEMENT GAP: REASONS FOR AND WAYS OF REDUCING THE GAP	
26.	MARKETING: A SKILL NEEDED BY TODAY'S ACCOUNTANTS	1
27.	TEACHING PROBLEM SOLVING WITH NCTM IN MIND	1
	UNDERSTANDING THE NONSEGMENTAL CONTEXT SEGMENTAL UNDERSTANDING	
29.	IDENTIFICATION OF GENDER DIFFERENCES IN MATHEMATICS PERFORMANCE ON THE NORTHWEST EVALUATION ASSOCIATION (NWEA) MEASURES OF ACADEMIC PROGRESS (M TEST DATA IN COLOMBIA, SOUTH AMERICA	
30.	MEASURING THE EFFECTS OF ATTENDANCE ON STUDENT PERFORMANCE IN LARGE SECTIO OF PRINCIPLES OF ECONOMICS	
31.	USING A COLLABORATIVE LEADERSHIP MODEL IN A TEACHER EDUCATION PROGRAM	1
32.	COLLABORATION: SUCCESSFUL STRATEGIES FOR WORKING TOGETHER AS CO-EDUCATORS	1
33.	THE ROLE OF BRAND EQUITY IN REPUTATIONAL RANKINGSOF SPECIALTY GRADUATE PROGRAMS IN COLLEGES OF EDUCATION	1
34.	SOCIAL LEARNING THEORY AS A CONDUIT TO PATIENT COMPLIANCE THROUGH WIRELESS TECHNOLOGY	1
35.	A THEORETICAL APPROACH TO PRODUCT MARKET COMPETITION AND FIRMS' CAPITAL STRUCTURE DECISIONS	
36.	UNDERGRADUATE STUDENT'S PERCEPTION TOWARDS RECYCLING: AN ASSESSMENT OF ENVIRONMENTAL AWARENESS ON CAMPUS	
37.	THE IMPACT OF A GRE PREPARATION PROGRAM ON THE ACTUAL GRE SCORES OF STUDEN FROM A MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM	
38.	AN EXPLORATORY INVESTIGATION OF MOTIVATIONS OF COLLEGE STUDENTS TAKING ONLINE/WEB-ASSISTED COURSES AND THEIR RELATIONSHIPS WITH LEARNING OUTCOMES	5:
39.	ALTERNATIVES TO CORPORAL PUNISHMENT GAINING MOMENTUM IN U.S. SCHOOLS	
40.	THE IMPACT OF THE SMARTBOARD IN THE MATH CLASSROOM	1
41.	SCOTTSDALE COMMUNITY COLLEGE PROVIDES THEIR STUDENTS OPEN ACCESS WITH END- END VIRTUALIZATION	
42.	A PIPELINE PROBLEM IN HIGHER EDUCATION: REALITY OR "COP OUT?"	2
43.	TWO DECADES OF GREAT IDEAS IN LEADERSHIP IN THE 20 TH CENTURY	1
44.	TEACHING COMPUTER FORENSICS AMPLIFIED BY CLOUD COMPUTING	2
45.	A MULTIDIMENSIONAL PERSPECTIVE OF ORGANIZATIONAL COMMITMENT IN HIGHER EDUCATION	

46. THE BOLOGNA ACCORD: OVERVIEW AND MARKETING IMPLEMENTATION IN ROMANIA __ 266



47.	THE REWARDS AND RISKS OF GREEN MARKETING	_ 280
48.	GREEN MARKETING: ARE ENVIRONMENTAL AND SOCIAL OBJECTIVES COMPATIBLE WITH PROFIT MAXIMIZATION?	_ 284
49.	HOW GREEN MARKETING AFFECTS CORPORATE POLICY	_ 287
50.	PRIVATE BENEFITS, MARKET SENTIMENT, AND INSTITUTIONAL OWNERSHIP CHANGE	_ 294
51.	LEARNING CHINESE AS A SECOND LANGUAGE	_ 300
52.	THE SIGNIFICANCE OF LANGUAGE COMPREHENSION ON PROBLEM SOLVING	_ 302
53.	ALIGNING CAREER AND TECHNICAL EDUCATION	_ 306
54.	ANALYTIC MODELS FOR STRATEGIC PLANNING: A CASE STUDY	_ 315
55.	THE INFLUENCES OF EMOTIONAL AND SOCIAL BEHAVIORS ON RETAIL INTERNSHIP EXPERIENCES	_ 316
56.	WORKSHOP: WEB 2.0: GRATIS ONLINE TOOLS WITH ENDLESS POSSIBILITIES	_ 319
57.	WORKSHOP: SPORT MARKETING	_ 326



SALARY INVERSION IN BUSINESS SCHOOLS

Tom Arnold University of Richmond Richmond, VA 23173 tarnold@richmond.edu

Raymond P. H. Fishe University of Richmond Richmond, VA 23173 pfishe@richmond.edu

Adam Schwartz Washington and Lee University Lexington, VA 24450 <u>Schwartza@wlu.edu</u>

Abstract

The paper analyzes AACSB salary survey data from 1979 to 2008. The question addressed in this analysis is whether salary inversion is wide-spread across the business disciplines. We find some evidence of mean level inversions in recent years, but not in all disciplines. Stochastic dominance methods confirm these results and show a significant trend towards salary inversion in most AACSB disciplines.

Keywords: Salary inversion, Stochastic dominance, Business disciplines

Introduction

The phenomenon of salary inversion may pose problems as administrators try to reward productivity but are constrained by equity considerations. Salary inversion occurs when a faculty member of higher rank receives a salary less than that of a faculty member of lower rank.* In an effort to provide better information to all faculty and administrators, we investigate the extent of salary inversion in business schools accredited by the Association to Advance Collegiate Schools of Business (AACSB). We study eight disciplines: Accounting, Computer Information Systems (CIS), Economics, Finance, Management, Marketing, Organizational Behavior, and Operations Management. Our dataset covers the years, 1979



to 2008. These are aggregate data, which reveal means, medians and selected observations on the across-university distribution of academic salaries.

We find salary inversion at the mean between assistant and associate professor ranks for Finance and Accounting disciplines at both private and public business schools, and for Economics and Operations Management at private schools. Typically, these average level inversions arise first at private schools and then at public schools. All of these inversions begin in the late 1990s or early 2000s.

We also analyze this information in terms of first- and second-degree stochastic dominance to examine whether junior ranks dominate the more senior ranks. First-degree stochastic dominance implies that salaries are uniformly higher across the entire distribution of all junior faculty members. Second-degree stochastic dominance is applicable when salary distributions cross, which negates evidence of first-degree dominance. For second-degree dominance, we develop a summary statistic to define the incidence of dominance between two salary distributions. This statistic reveals the fraction of the junior rank's cumulative distribution that dominates a more senior rank's cumulative distribution.

Our results show only a limited number of years with stochastic dominance in which a junior rank dominates a senior rank. We find no examples of either first- or second-degree dominance for associate and full professors, and seven years with second-degree dominance between assistant and associate professors. These are all recent years and arise in the disciplines of Finance and Operations Management.

Data

The AACSB has conducted salary surveys from member business schools since 1968. Beginning with the 1977-78 survey, the AACSB changed the method by which it reported salary distributions, providing data on salaries at specific percentiles. The percentile breakdown reported maximum and minimum salaries as well as salary cutoffs for the 10%, 25%, 50%, 75%, and 90% levels. In 1983, the AACSB introduced



additional discipline distinctions—particularly the Management discipline was further distinguished with Organizational Behavior and Operations Management distinctions.

The data that we analyze consists of 18,742 entries from the AACSB annual surveys conducted between 1979 and 2008. The smallest unit of measurement in these surveys is the rank and hiring status of faculty. Specifically, the survey reports provide average and percentile information for existing instructors, assistant, associate and full professors, as well as new hires. These salary data are reported separately by discipline, institutional type (public or private) and accreditation status.

Analysis

Our focus is on relative salary comparisons between ranks within a given discipline. Table 3 (reproduced below) provides a summary of mean level salary inversions for all years in our sample. Four disciplines— Accounting, Economics, Finance and Operations Management—show evidence of salary inversion in private business schools, whereas Organizational Behavior, Accounting and Finance show this evidence in public business schools. Across these groups, the average size of such inversions range from \$500 in Economics to \$5,775 in Operations Management for private schools and from \$300 in Accounting to \$3,700 in Finance for public schools.

Table 3 also shows that salary inversion is a recent phenomenon with the earliest case in Finance in 1999. Most instances, however, began in 2002 or 2003, which means that overall salary inversion has affected business schools for only a few years. Although deans and department chairs must rationalize salary decisions to other administrators and possibly the faculty, these results show relatively small differences in compensation, except for the discipline of Operations Management. Thus, the concern expressed by LeClair (2004) that salary inversion is widespread in business disciplines may be overstated.



The results above show evidence of average-level salary inversion across certain AACSB disciplines for assistant and associate professor ranks. The significance tests, however, show more similarity between the junior ranks than indicated by average comparisons, particularly for private business schools. We turned to stochastic dominance methods to extract addition details about these results.

In the full paper, Table 5 reports all cases of dominance in either direction of rank. These results show consistent dominance by associate professors over assistant professors in the early years of the AACSB salary surveys. For the six years, 1983 to 1988, 85% of the entries show first- or second-degree dominance by associate professors in private schools, and 95% of the entries show associate professor dominance in public schools. The nine-year period at the end of our sample, 2000 to 2008, shows that only 40% of the entries display dominance by associate professors for private schools and only 64% show for public schools. Thus, the distribution of assistant professors is trending towards less dominance by associate professors. This trend holds for all disciplines except Economics in public schools and Organizational Behavior in both private and public schools.

The stochastic dominance results suggest that there may be a trend towards greater salary inversion over time. We develop a measure of the degree of first-degree dominance between two salary distributions to better understand this trend. In the full paper, Table 7 reports the dominance fraction for both private and public schools across the eight business disciplines. In private schools, only the discipline of Organizational Behavior is not participating in this trend, which appears to be strongest in Finance and Operations Management. The trend is also present in public schools but the dominance fraction is not as large as in private schools. Overall, these results indicate that salaries of assistant professors are converging (or exceeding) to those of associate professors across business school disciplines with only a few notable exceptions.

References



LeClair, Dan, 2004, The Professor's Paycheck, *BizEd* (March/April), 58-60.

Toutkoushian, Robert K., 1998, Using Regression Analysis to Determine if Faculty Salaries are Overly

Compressed, Research in Higher Education 39 (1), 87-100.

*Toutkoushian (1998) uses "level of experience" instead of rank to define salary inversion. We will use the rank meaure, as the level of experience is not available from the AACSB salary survery.

Table 3

Salary Inversions for Assistant versus Associate Professors by Discipline

This table reports the years during which the average salary of assistant professors exceeded associate professors by discipline and by type of institution. The average difference in salaries is reported using only years where salaries are inverted. A positive number implies that assistant professors' average salary exceeding associate professors' average salary by that mean amount.

Comparison	Accounting	Computer Information Systems	Economics	Finance	Management	Marketing	Organizationa Be havior	l Operations Management
		Panel A	A: Private AASC	CB-Accredited B	usiness Schools			
Inversion Years	2003-2008	none	2000-2002, 2004-2005	1999-2007	none	none	none	2002-2007
Average Salary Difference for Inversion Years	\$2,117	n.a.	\$1,140	\$3,022	n.a.	n.a.	n.a.	\$5,350
		Panel	B: Public AACS	B-Accredited Bu	siness Schools			
Inversion Years	2004-2008	none	none	2002-2008	none	none	2008	none
Average Salary Difference for Inversion Years	\$1,960	n.a.	n.a.	\$3,057	n.a.	n.a.	\$2,300	n.a.



BLACK MALE REPRESENTATION IN HONORS PROGRAMS: POLICIES AND PRACTICES IN SELECTED AMERICAN PUBLIC COLLEGES & UNIVERSITIES

Lulrick Balzora Florida Atlantic University <u>Ibalzora@fau.edu</u>

Dianne Wright Florida Atlantic University-Davie Campus Davie, FL 33314 <u>dwright@fau.edu</u>

Abstract

The researchers conducted a pilot case study to determine the presence of Black males in honors programs at the postsecondary level. Case study results are based on participant observation in a selected postsecondary institution and document analysis as well as an expanded version of the study using the results of a researcher developed Black male student survey, a focus group, and telephone interviews with Directors of Honors Programs in selected settings to determine what honors programs have done to increase the presence of Black males in such programs and what have been the results?



INTERNATIONALIZING HIGHER EDUCATION: ONE DOCTORAL INSTITUTION'S INITIATIVE TO LEARN FROM A TRANS-ATLANTIC IMMERSION SEMINAR

Mette Baran Cardinal Stritch University Milwaukee, WI 53217 <u>mlbaran@stritch.edu</u>

Janice Jones Cardinal Stritch University Milwaukee, WI 53217 <u>je2jones@stritch.edu.</u>

Abstract

The world is rapidly becoming more interconnected and doctoral students will be involved in international work and need global experiences that will prepare them for their future roles. The authors discuss an innovative study-abroad program for credit implemented by a private university in Milwaukee, WI offering doctoral students an opportunity to immerse themselves in the Italian culture. Specific measurable course objectives are discussed as well as rationale for the course.

Keywords: Keywords: Professional learning community, International experience, Higher education, Leadership, Italy

Introduction

This paper presents the approach of a three year Doctorate in Leadership Program for the advancement of Leadership, Learning and Service in Higher Education at Cardinal Stritch University in Milwaukee, Wisconsin, to integrate a global perspective to the program by providing an international learning experience for students. The program is aimed at professionals with present or emerging leadership responsibilities in higher education. Keeping in mind the underlying characteristics of adult learners, the program follows a cohort model structured as a learning community. The core idea behind a learning community is collaborative learning. Faculty recognize the diversity of knowledge students already possess as educators and professionals, and students are encouraged to share their experiences in class



and in study teams assisting each other and exploring ideas together. During the first year of the program, the focus is on advancing students' knowledge of leadership. The second year is the learning year, followed by the service year. Each year build on previous knowledge and by adding more depth and understanding of the material.

Discussion

A fundamental belief among many educators today is that higher educational institutions will benefit from internationalizing the curriculum and one of the roles of educators today is to prepare students to be successful in a global interconnected world. Internationalization is "a process that prepares the community for successful participation in an increasingly interdependent world" (Francis, 1993, p. 5). There are many approaches an institution of higher education can utilize to address this goal; one of them is to provide a travel-abroad experience for credit. However, difficulties may arise in determining how to go about designing and implementing a multi-cultural curriculum involving a foreign study component. The intended purpose is to promote an opportunity for students to study abroad in the Umbria region in Italy during a ten day period. This one-credit Ph.D. course is a hybrid blend of face-toface course work, cultural immersion in Italy, and online completion attending to developing research skills and theory building in an international setting. This opportunity for students to immerse themselves in an international culture came about after a group of faculty felt that the students would be involved in international work and that this experience would better prepare them for their future roles. For the purpose of this paper, we focus only on one form of cross-cultural training, namely study abroad programs.

The issues facing higher education in the 21st century have many common characteristics around the world. Issues do not have national boundaries so it becomes paramount that educational leaders gain access to the experiences and knowledge of their international counterparts. It is estimated that that by



2050 most of the global economy will be part of a single market (Ireland & Hitt, 1999). Development of international competency and multi-cultural understanding by immersing students in an international setting offers a broader understanding of the complex global issues educational leaders need to successfully address. Research supporting the idea that study-abroad programs help prepare students for cross-cultural interaction is plentiful. As an example, in a study of 100 hospitality managers working outside the United States, first-hand international experience was considered the most effective method of cross-cultural training, and study abroad programs were mentioned as an alternative for gaining first-hand international experience (Kriegl, 2000). Excellent research and teaching is neither one-dimensional nor bound to national borders, and cooperation across disciplines and borders is the only way in which academia can successfully address the various challenges of our society (Institute of International Education, 2009). In this study abroad experience, our students will develop these understandings through the lens of utilizing interview methodology. "Through conversations we get to know other people, get to know their experiences, feelings, and hope, about the world they live in" (Kvale, 1996, p. 5).

Preparation of Course Components

Study abroad programs typically consist of lectures, discussions, field trips, and cultural events (Douglas & Jones-Rikkers, 2001). As our students receive Ph.D. credit for the overseas experience it was critical to include a research component to the course. As a result, interview methodology was added as a key learning objective. In addition, a pre-departure component to the program was included so that students develop an understanding of the theoretical underpinnings of the United States' higher educational system with special attention to administration, student diversity, adult learning, access and curriculum. Students will then compare and contrast these theories to the Italian higher educational system utilizing interview methodology, visits with the University of Perugia, dialogue with students,



professors, and administrators, organizational visits, field trips, and lectures from social leaders. Black and Mendenhall (1990) indicate that cross-cultural relationship competency, the ability to form and maintain interpersonal relationships with members of a host culture, is vital for success in cross-cultural settings. The pre-departure component also serves another purpose helping prepare student for another culture as adapting to another culture may be challenging to many students. According to Linowes (1993) one may experience a certain amount of confusion, disorientation, and emotional upheaval, or culture shock. Culture shock will obviously be more severe when individuals move to cultures that are most unlike their home environments.

Questions that guide analysis and exploration throughout the seminar are:

What are the key challenges facing higher education leaders today? How can higher educational institutions ensure sustainability? What leadership skills are required to successfully lead higher educational institutions in an increasingly globally complex environment? What should the curriculum look like in the 21st century? How can institutions of higher learning best meet the learning needs of adult learners?

Students address the above questions through the following measurable course objectives: 1. A paper that utilizes a theoretical framework and interview research to demonstrate knowledge and understanding of similarities and differences that exist between cultures and practices that pertain to higher education addressing key challenges, curriculum, and issues of sustainability. 2. A paper that incorporates interviews with Italian administrators and faculty members in higher education to determine their views of what leadership practices and skills are needed to lead and sustain higher educational institutions in Italy. 3. A paper that highlights main excerpts based on dialogue with Italian University students pertaining to adult learning. 4. Journal reflections where students note their insights, experiences, and pursuits as they investigate comparisons and contrasts between the United



Sates and the Italian culture including reflections revolving around: (1) what am I learning about the Italian culture and practices that are impacting my values, attitudes and practices and (2) what global issues are shared across cultures and what implications does that have for my leadership attitudes, practices and service; and (3) what can I do to facilitate action to address local and/or global issues. Entries may be written reflections, summaries of conversations, artifacts, drawings, or any other creative mixed media that conveys meaning.

Conclusion

Through dialogues, lectures, visits, readings, research papers, and journal reflections, doctoral students interested in comparative higher education explore questions of culture, globalization, educational borrowing and lending, with focus on the Unites States and Italian higher educational contexts. The expected outcome is that students develop an in-depth awareness of cultural differences; the ability to apply critical theory in domestic and international settings; and practical research skills in interview methodology.

References

- Black, J. S. & Mendenhall, M. E. (1990). Cross-Cultural Training Effectiveness: A Review and Theoretical Framework, *Academy of Management Review*, *15*, *113-136*.
- Douglas, C., Jones-Rikkers, C.G. (2001). Study abroad programs and American student worldmindedness: An empirical analysis. *Journal of Teaching in International Business*, *13*(1), 55-66.
- Francis, A. (1993). Facing the future: The internationalization of post-secondary institutions in British Columbia. Vancouver: British Columbia Centre for International Education.



Institute of International Education. (2009). *Joint and Double Degree Programs: An Emerging Model for Transatlantic Exchange* (2009). Witherell, S., Soman, L., & Kuder, M. (Eds). Retrived on January 21, 2010 from:

http://www.iie.org/PrinterTemplate.cfm?Section=PressReleases&Template=/ContentManagement/HT

MLDisplay.cfm&ContentID=28951

- Ireland, R. D. & Hitt, M. A. (1999). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *Academy of Management Executive*, *13* (1), 43-58.
- Kriegl, U. (2000). International hospitality management. *Cornell Hotel and Restaurant Administration Quarterly*, 41, 2, 64-71.
- Kvale, S. (1996). Interviews: An Introduction To Qualitative Research Interviewing. Sage Publications Inc., Thousand Oaks, CA.
- Linowes, R. G. (1993). The Japanese manager's traumatic entry into the United States: Understanding the American-Japanese cultural divide. *Academy of Management Executive*, 7 (4), 21-38.



BUILDING A COMMUNITY OF LEADERS: ENHANCING AND SUSTAINING GLOBAL LEADERSHIP CAPACITY WITHIN A DOCTORAL PROGRAM

Mette Baran Cardinal Stritch University Milwaukee, WI 53217 <u>mette baran@yahoo.com</u>

Janice Jones Cardinal Stritch University Milwaukee, WI 53217 je2jones@stritch.edu

Kristine Kiefer Hipp Cardinal Stritch University Milwaukee, WI 53217 <u>kahipp@stritch.edu</u>

Abstract

This paper reports the findings of a post international immersion opportunity to learn more about participants' experiences and attitudes toward the immersion course. Using qualitative methodology, participants responded to questions related to their international learning experience. Results indicated that participants felt that the international experience had a transformational effect on their leadership. *Keywords: Professional learning community, International experience, Higher education, Leadership, Italy*

Introduction

Leading organizations today is a complex task which demands a plethora of skills and competencies, including demonstrating cultural and global awareness. Higher education, considered centers of inquiry and learning, have a moral obligation and purpose to develop students' knowledge base as they are being prepared to become future leaders. Students need to be experienced in and aware of the challenges that may face when interacting with people from other cultures. Internationalization is "a process that prepares the community for successful participation in an increasingly interdependent



world" (Francis, 1993, p. 5). The opportunities and challenges afforded by the cultural and linguistic diversity of contemporary life now means that an internationalized education for post-secondary graduates is an educational imperative for success (Bond & Thayer Scott, 1999). Therefore, one goal of our doctoral program in Leadership for the Advancement of Learning and Service is to provide students with an opportunity to immerse themselves in an international culture to bring about meaningful transformation of self, organizations, systems and communities in a rapidly interconnected world.

Internationalizing the curriculum involves many components and initiatives offering many interpretations depending on the needs of the initiative takers (Francis, 1993, p. 5). The extent of the initiative covered in this study involves a study abroad experience to immerse students in the Umbrian and Franciscan cultures, and to further their abilities as leaders to facilitate personal, organizational and societal change. The mission is to extend transformative learning in an authentic setting. In addition, an accompanying course has been designed for current and past doctoral-level students to broaden perspectives through observational research. This course is conducted at the Pieve International School in Corciano, Italy and surrounding towns (i.e., Assisi, Perugia, Todi, etc.) offering participants multiple opportunities to examine their leadership, and learn from and engage in dialogue with Italian leaders and one another; and to think deeply about serving at multiple levels. The schedule includes visits to Franciscan sites, areas of reflection, sustainable organizations, and meetings with prominent Italian spiritual, business, educational, service-oriented, and non-profit leaders to discuss ideas and perspectives, and consider potential partnerships around global issues to broaden their perspectives. Students collect, analyze and report data incorporating a synthesis of "lived" and "observed" experiences, which include insights from literature and theory, observations, dialogue, reflections, and comparisons and contrasts across cultures related to leadership and service. Findings are intended to improve ways to facilitate personal, organization and/or societal change.



Literature Review

Two main theories, namely transformative learning (Mezirow, 1991) and professional learning communities/organizations (Huffman & Hipp, 2003; Hipp & Huffman, 2010; Senge, 1990) provided frameworks for course development and course objectives and further informed this study. Mezirow (1991) argued that reflecting on generally accepted assumptions leads to the assessment and reassessment of our beliefs and thus creates an ideal learning environment for progressive learning. For learners to change their "meaning schemes (specific beliefs, attitudes, and emotional reactions)," they must engage in critical reflection on their experiences, which in turn leads to a perspective transformation (p. 167). He noted:

Perspective transformation is the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrating perspective; and, finally, making choices or otherwise acting upon these new understandings. (p. 167)

In other words, perspective transformation explains how the meaning structures that adults have acquired over a lifetime become transformed. These meaning structures have served as our frames of reference accumulating the totality of individuals' cultural and contextual experiences and that influence how they behave and interpret events (Taylor, 1998). In 1990, Peter Senge defined a learning organization as one in which "people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (p. 3). Similarly, Hipp and Huffman (2010) view professional learning communities as "Professional educators working collectively



and purposefully to create and sustain a culture of learning for all students and adults (p. 12).

Methodology

The methodology included in-depth interviews of 5 randomly selected students and alumni who are past participants of the program to elicit their perceptions of the international immersion course and the transformational sustainability of their experiences. Students and alumni responded to 4 questions either via email or face-to-face interviews.

Findings

The following questions were asked:

- How has engaging in dialogue, reflection and self discovery in Italy established a deeper understanding of the challenges and responsibilities we face together in our interconnected world to facilitate local and global change?
- 2. What global issues are shared across cultures and what implications does that have for your leadership attitudes, practices and service?
- 3. Reflect on your definitions and the integration of leadership, learning and service in a global world.
- 4. How are your current conceptions of leadership, learning and service expanded as a result of this international immersion?

Four females and one male participated. Appropriate clarifying probes were used when needed to ensure that the participants have elaborated their answers fully through story. The responses of the interviews were transcribed in a word document and coded by raters to identify thematic trends. Initial codes were reviewed by auditors in order to ensure rater objectivity.

The experience gave students a deeper appreciation for what it means, what it looks like and how it feels to interact with and connect with another culture. Overwhelmingly, all students mentioned the value of the personal relationships and the level of depth that emerged from taking time to have



meaningful dialogue with other people with different worldviews. This awareness now also transcends the experience as students now have a greater appreciation for people from another cultural background than their own and they are more opt to inquire and involve them in conversations. In addition, the students that work as educators themselves now report that they make an effort to teach their own newfound knowledge to their own students.

In addition, the experience created the context and awareness of the interconnectedness of our world. One student appreciated the opportunity to link the doctoral program to the values of the Franciscan University by gaining an appreciation for the true roots of the University. In addition, students became aware of their roles as spiritual leaders, a role in which they had not considered prior to the experience, but one they now feel adds to their leadership capacity.

Students returned from the trip with a greater awareness of how cultural issues shape other issues in an organization and the notion that a leader has to be aware and reflective on how the culture of one's country, community, organization, and population influence the decisions people make their behavior, attitude and perceptions. As one student reported, "I am also better able to appreciate and have patience for various work and management styles that come from differing backgrounds. This allows better working relationships." Furthermore, another student shared, "The experience has become an anchor piece in my life as now consider everything from an international lens. It has helped me to overcome misconceptions about diverse groups that shape society." Hence, the experience helped inform their own leadership practices and worldview.

Conclusion

The responses confirmed literature findings on the value of an international immersion experience for students at any level. Overwhelmingly, the students considered the experience the best in the doctoral program as it helped create awareness of what is required of their own leadership practices in a world



that is increasingly becoming more and more interconnected and interdependent and where a leader needs to recognize the value of everyone's voice in an organization.

References

- Bond, S., & Thayer Scott, J. (1999). From reluctant acceptance to modest embrace: The internationalization of the undergraduate education. In S. Bond & J-P. Lemasson (Eds.), *A new world of knowledge: Canadian universities and globalization* (pp. 45-75). Ottawa: International Development Research Centre.
- Francis, A. (1993). Facing the future: The internationalization of post-secondary institutions in British Columbia. Vancouver: British Columbia Centre for International Education.
- Hipp, K. K., & Huffman, J. B. (Eds.) (2010). *Demystifying professional learning communities: School leadership at its best.* Lanham, MD: Rowman & Littlefield.
- Huffman, J. B., & Hipp, K. K. (2003). *Reculturing schools as professional learning communities.* Lanham, MD: Scarecrow Press.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization.* New York: Currency/Doubleday.
- Taylor, E. (1998). The theory and practice of transformative learning: A critical review. Information Series No. 374. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, College of Education, the Ohio State University.



DISPELLING THE MYTHS ON BILINGUALISM: EFFECTIVE BILINGUAL EDUCATION MODELS

Lucia Buttaro Ruth S. Ammon School of Education Adelphi University Garden City, NY 11530 <u>Buttaro@adelphi.edu</u>

Quantitative research seeks to explain and make predictions that will generalize to other persons and places. The intent is to establish, conform, or validate relationships and to develop generalizations that contribute to theory. Quantitative research has been used in some parts of the study.

The research questions addressed were:

- (1) What are the district leadership practices that facilitate academic and linguistic growth/success for language minority students?
- (2) What are the campus leadership practices that facilitate academic and linguistic growth/success for language minority students?
- (3) What are the characteristics of the teaching staff that facilitate academic and linguistic growth/success for language minority students?
- (4) What are effective teaching practices that facilitate academic and linguistic growth/success for language minority students?
- (5) What are the characteristics of parents and parental involvement on the seven campuses?
- (6) What are the characteristics of program(s) serving language minority students?

Data Collection

The study data gathering included a teacher questionnaire and interviews, interview with the district administrator responsible for the district bilingual education program, campus administrator questionnaire and interviews, parent interviews, and on-site school classroom visitations by the research team. The teacher and principal questionnaires were designed and field tested by Mr. Oscar



Cardenas of the Texas Education Agency Special Populations Division in the fall of 2005. Subsequently, the number of questions on the teacher questionnaire was expanded by the Texas A & M Research Team. The questionnaire included multiple choice, yes-no, open ended, and likert type questions. The teacher questionnaires were subsequently mailed to all seven schools by the Texas A & M Research leader for distribution to the bilingual teachers that taught at the school during the years designated to the study. Teacher questionnaires were filled out before hand and brought to the on-site interviews. Principal questionnaires were filled out during the on site interviews.

The on site visits consisted of a two day visit to five of the schools and a one day visit to two of the schools during the spring semester of 2006. During the school visits, the research team members had interviews with the district administrator (bilingual coordinator/director), the campus principal, teachers and parents. Classroom visits were conducted at each school site to observe the bilingual classroom for effective bilingual education classroom practices that were consistent with the current research. The research team visited and observed in each classroom for about 30-45 minutes. Non-bilingual education classroom the school site to see what effective teaching practices were also present throughout the school. Researchers noted anecdotal records and took notes during observations in the classrooms.

Collected data were then analyzed by members of the Research team. Triangulation, used in all types of qualitative research, is the process of using multiple data collection methods, data sources, analysts, or theories to check the validity of the findings. If similar themes are noted in data collection form the different sources, the credibility of the interpretations is enhanced. The research team collected the data from the district level perspective, the campus administration, teacher, and the parent in an attempt to validate the findings of the study.

Analysis of the Data



The study findings are being reported to support the research questions. The research findings of the data are being divided according to the data collection procedures used, specifically teacher questionnaire responses, teacher interviews, campus administrator interviews, district bilingual director interviews and parent interviews.

District Leadership

There are several district leadership practices that facilitate academic and linguistic growth/success for language minority students in this district. In their recent study on effective practices for improved student performance, the Texas Center for Educational Research 2005), points to essential resources for schools. District support for teacher and administration professional training includes regular training practices. Throughout Texas schools, the rate of principal training practices occurs over 54% of the time while teacher training occurs 63% of the time. According to Garcia (1998, p. 77)

"...the call for teachers as public and critically engaged intellectuals and cultural workers places teacher work at the forefront of pedagogical politics that raises questions, subjectivist knowledge with which they labor, and pushes classrooms toward a democratizing notion concerning schooling."

Campus Leadership

The principals of the successful schools had extensive training in bilingual and ESL education with a Master's Degree in Bilingual Education. They had also been a bilingual or a migrant teacher thus having knowledge of bilingual education philosophy and theory.

"Certification can prove to be essential in the process of a program ... several organizations have developed guidelines and certification standards for teachers who work in English as a Second Language (ESL) and bilingual programs. These standards build on basic program standards and also include proficiency in written and oral forms of two languages, as well as skills in developing students' language abilities," (Hakuta, et al, 1997).



The principal was an instructional leader monitoring and visiting classrooms frequently during the week, focusing the teachers on instruction through vertical and horizontal planning on a weekly basis, and empowering teachers to make instructional decisions in their classrooms. Teachers expressed that they felt that the principal was collaborative in their leadership with high expectations of the staff and the students. Such practices are reflected in the professional literature,

" ...specific characteristics crucial to the development of effectiveness and thus to a positive school social climate in bilingual schools include: a safe and orderly school environment, common agreement on a strong academic orientation with clearly stated academic goals, objectives and plans, well organized classrooms, and well functioning methods to monitor school inputs and students' outputs" (Carter & Maestas, 1982).

One of the focuses of the principal was in providing staff development to the teachers in the area of literacy development on a yearly basis. Updating teacher knowledge makes the difference for students daily through dynamic learning. The principal also keeps informed on student test scores through open communication with her faculty. An awareness of the quality of testing can make a difference. The principal is also aware of the strengths and weaknesses of the staff through daily classroom visits. The principal is very familiar with the community, and the parents commented that they felt welcomed at the school. In addition, the social climate is often determined by the principal and her attitude toward the community, "...a well functioning total system producing a school social climate that promotes positive student outcomes is one characteristic of an effective bilingual school," (Carter & Maestas, 1982).

Altogether, the characteristics of the principal lay the groundwork for success in the total school program,



"...the following attributes are identified as being associated with effective schools and classrooms: a supportive school-wide climate, school leadership, a customized learning environment, articulation and coordination within and between schools, some use of the native language and culture in the instruction of language minority students, a balanced curriculum that incorporates both basis and higher order skills, explicit skills instruction opportunities for student-directed activities, use of instructional strategies that enhance understanding, opportunities for practice, systematic student assessment, staff development, and home and parent involvement," (Hakuta et al, 1997).

Teaching Staff

All the teachers on the successful school campuses are bilingual or ESL certified, which is essential to long term success in the program, (Hakuta et al., 1997). Most of the staff taught at the school for more than ten years, and they attribute this longevity and stability as contributing to the success of the students. There are teachers from Mexico on the staffs of some of the schools that know the finite points of the Spanish language and are able to teach the Spanish Language Arts with a high degree of proficiency.

Teachers believe all students can learn and have high expectations. They described themselves as caring, but structured in their approach to the delivery of the curriculum. Second language learners' success is often predetermined by teacher expectation, (Hakuta et al., 1997).

Teachers meet on a weekly basis for either vertical or grade level planning. During the planning, the teachers develop six weeks' plans to address the needs of the students. Ensuring internal support through regular planning periods creates a successful school climate in the school, research indicates that the successful

"...climate includes the following components: high staff expectations for children and the program, strong demand for academic performance, high staff morale. High staff morale includes the following:



strong internal support, consensus building, job satisfaction, sense of personal efficacy, sense that the system works, sense of ownership, well defined roles and responsibilities, belief and practice that resources are best expended on people rather than on educational soft and hardware" (Carter & Maestas, 1982).

References Available Upon Request



PERCEPTIONS ABOUT SCHOOL AND SCHOOLING: A STUDY OF LATINO/A HIGH SCHOOL STUDENTS IN THE SOUTHERN PART OF THE UNITED STATES

Lucia Buttaro Ruth S. Ammon School of Education Adelphi University Garden City, NY 11530 <u>Buttaro@adelphi.edu</u>

Abstract

The 2000 United States Census Report reflected the changing racial and ethnic composition of the nation. Although most non-Caucasian groups experienced an increase in growth, the Latina/o population had the most significant increase during the last two decades. Nationwide, there was a 58% increase in Latina/o population with Latina/os surpassing African-Americans as the largest minority group in the United States (Duran, 2002). The southeastern region experienced a major increase in the Latina/o population with the Latina/o population more than tripling between 1990 and 2000 in six states: Alabama, Arkansas, Georgia, North Carolina, South Carolina and Tennessee. In fact, North Carolina had the largest increase in Latina/o population in the entire country, an increase of 394% (see Table 1). When examining the Latina/o population within the new settlement states, the changes are even more dramatic. Six counties, four located in North Carolina, experienced an increase of over 1,000% between 1990 and 2000 (Kochhar, Suro & Tafoya, 2005). North Carolina, the state that has experienced the most growth in Latina/o population leads the nation in Mexican and Mexican-American population growth in terms of percentage (NCCAT, 2002).

Challenges to Educators

At a state level, the North Carolina Department of Public Instruction reported that 67,929 Latina/o students were enrolled during the 2001-2002 school year versus 9,540 Latina/o students enrolled during the 1991-1992 school year, an increase of 612% (Konac, 2003). Unsurprisingly, Latina/os are the fastest



growing student group in North Carolina's public school system (NCCAT, 2002).With such a significant increase in Latina/o population, the schools will have to make significant adjustments in their curriculum, instruction, academic and social services to meet the specific academic and cultural needs of these students. Nearly one-fourth of Latina/o students in the six southern states do not speak English well or at all (24%) (Kochhar, Suro & Tafoya, 2005), and the language most commonly spoken at home is Spanish (Bilingualism, 2004). Teaching students English is an immediate concern for educators because the language used in instruction in public schools is English. English language proficiency in reading, writing, and speaking is considered a foundation for academic achievement and attainment. Because the Latina/o student population emerged in select areas in the southeastern states, many schools do not have English as a Second Language (ESL) programs in place to help students with their specific linguistic needs (Kochhar, Suro & Tafoya, 2005).

Research Objectives and Questions

The goal of this study was to provide educators with useful information to facilitate environmental changes in order to better accommodate Latina/o students' needs. With the aforementioned goal in mind, the following research questions were developed:

Research Question 1: What are the demographic profiles of Latina/o students enrolled in North Carolina's secondary schools? Specifically, what are the demographics of their families and themselves, their language profiles and academic profiles?

Research Question 2: What are secondary Latina/o students' perceptions about school and schooling? Specifically, what are their perceptions about their guidance counselors, teachers, the classroom environment and the school environment?

Methodology

Population and Sample



The target population for this study was all public high school students who self reported their racial/ethnic background as Latina/o or Hispanic in North Carolina. Random sampling of high schools would be problematic as the Latina/o population is very disproportionately distributed. The North Carolina Department of Public Instruction provided the researcher a descending list of public high schools in regard to the percentage of Latina/o student population prompting the researcher to conduct a purposeful convenience sample. The researcher, using the percentage of Latina/o student population and the total enrollment of the school, calculated the approximate number of Latina/o students in each school. Schools that were ideal for participation were those that had a significant number of Latina/o students in each school. High schools with high percentage of Latina/o students do not necessarily have a large number of Latina/o students. The researcher paired the high schools with their school systems that had two or more high schools with a significant Latina/o student population, as determined by percentage and number, and the school systems that were known to the researcher or referred to the researcher as being receptive to participating in educational studies. After contacts to fifteen high schools, a total of nine high schools gave consent to conduct the research study.

Survey Instrument

The researcher created an instrument with survey items, format, and style that was modeled after and from other existing instruments (Suarez-Orozco, C & Suarez-Orozco, M, 1995; Valenzuela, 2000). Questions and prompts were organized thematically. To increase the instrument with user-friendliness, the researcher used a five point Likert scale to prompts. The researcher hired a data service to transform the survey into bubble format that could be scanned upon completion.

Data Analysis

The completed surveys were scanned by the data consulting firm into five separate EXCEL data sets. After the data was successfully merged into a single SPSS file, all data was converted into numeric codes



for the 1,281 cases. Cases in which students identified their racial/ethnic background as Latina/o or Hispanic were copied and a new, separate data set was created. Out of the 160 cases, 4 were excluded from analysis due to the large number of missing items. Responses from 156 Latina/o students who fully completed the survey were used for descriptive and inferential statistical analysis. Latina/o students constituted 12% of the total surveyed participants.

Discussion

The findings of this study provide educational stakeholders with recommendations for improving education for Latina/o students in public high schools as follows:

- Latina/o students appear to have concerns about graduating from high school and experience conflict about their future as reflected in the discrepancy between examining their future goals and graduation course of study. A comprehensive mentoring/advisory program is needed that begins in middle school and continues through high school that covers graduation course requirements, explores future occupations, and discusses pre-requisites for college admission and sources of funding with students and parents.
- Schools need to further explore the reasons that Latina/o students do not feel safe, welcomed, or
 appreciated and make environmental changes. An example would be re-evaluating the
 extracurricular activities offered at the school and offer extracurricular activities that appeal to
 Latina/o students and work within their work schedules and transportation issues so that they can
 participate and feel like a contributing member of the school.
- Teachers need to focus on making their classrooms feel safe and inviting to Latina/o students and strengthen their communication and relationships with their students. When developing lessons and activities, teachers need to keep in mind that Latina/o students may feel uncomfortable participating in a whole class activity (.i.e. raising hand in class, talking in front of peers) and prefer



to work in groups. In addition, teachers need to find ways to create classroom environments that

are balanced with academic rigor and an understanding of language minority issues.

References Available Upon Request



THE HACKMAN AND OLDHAM JOB CHARACTERISTICS MODEL: INTERNATIONAL IMPLICATIONS

Rickey J. Casey University of the Ozarks Clarksville, AR 72830 <u>rjcasey@ozarks.edu</u>

Jay Robbins Ouachita Baptist University Arkadelphia, AR 71998 <u>robbinsj@obu.edu</u>

Deborah Sisson University of the Ozarks Clarksville, AR 72830 <u>dsisson@ozarks.edu</u>

Abstract

This study tested the Hackman and Oldham's (1975) Model in a bank in Guatemala City, Guatemala and evaluated several of the dimensions of the model. This study compared the characteristic of high internal work motivation obtained from the bank in Guatemala to those obtained from manufacturing, retail, service and sales sector industries to determine if there are any significant differences among these industries. The research evaluated the relationships across the industries in skill variety and task identity, task significance and autonomy as well as the relationship between feedback and autonomy. This study evaluated the model across four industries and in Guatemala City, Guatemala. The study also evaluated possible cultural issues associated with the model.

Keywords: Job characteristics model, motivation, International, job redesign, skill variety.

Introduction

In order to survive in today's global economy, many U.S. companies are downsizing or reorganizing. Unfortunately this strategy does not consider the effects of this decision on the motivation of the individual.



This strategy has proven to be flawed. When a workforce has been downsized or reorganized, the results is employees could be assigned to new positions that they perceive as not challenging. Performance could then decline, and have a significant negative influence on productivity.

The Hackman & Oldham Model was developed to specify how job characteristics and individual differences interact to affect the satisfaction, motivation, and productivity of individuals at work. The model is helpful in planning and carrying out changes in the design of jobs.

In developing their model, Hackman & Oldham (1976) built upon the foundation of Herzberg's two-factor theory (Herzberg, Mausner & Synderman, 1959) with some theoretical underpinnings directly from the expectancy theory (Evans, Kiggundu & House, 1979).

Instrumentation

The Job Diagnostic Survey (JDS) is an instrument designed to measure the key elements of the job characteristics theory. The survey measures several job characteristics, employee's experienced psychological states, employees' satisfaction with their jobs and work context, and the growth need strength of respondents. The instrument has a variety of scales depending on the section. Sections 1 through 5 will utilize a 7 point scale. Section six will utilize a 10 point scale, and sections 7 and 8 will utilize a 5 point scale.

The JDS is designed to be completed by the incumbents of the job or jobs in question-not by individuals outside the job. An instrument designed for the latter purpose is entitled the Job Rating Form (JRF) and will be completed only by management personnel. The Job Rating Form uses a 7 point scale for all three sections.

The JDS is not copyrighted and, therefore, may be used without the author's permission.

Results/Conclusions



In review, the researchers found the Hackman & Oldham model to work for the variables that were used. The results of this study could be utilized in the redesign of current jobs and to evaluate and increase motivation in the manufacturing sector.

Objectives and Hypotheses

The objectives of this study were to test the Hackman and Oldham's (1975) Model in a bank in Guatemala City, Guatemala and evaluated several of the dimensions of the model. This study compared the characteristic of skill variety, task identity, task significance, autonomy and feedback high internal work motivation obtained from the bank in Guatemala to those obtained from manufacturing, retail, service and sales sector industries to determine if there are any significant differences among these industries. The study also looked at a study of a bank in Nicaragua and evaluated those results in comparison to the other surveys. The results of the study found there is a marginal significance between the industries and the study in Guatemala. The results also found there were a substantial difference in the scores of the banks in Guatemala and Nicaragua and the companies here in the United States.

Ho1 (Null) There is no difference among the mean for the manufacturing, sales, service industry and the bank in Guatemala.

Ho2 (Alt) There is a difference among the mean for the manufacturing, sales, service industry and the bank in Guatemala.

Methodology

Research Instrument

To test the proposed hypotheses, two sources of data were required. The first source is the primary data and the second source is the secondary data. Primary data were generated by the utilized research instrument. The Job Diagnostic Survey (JDS), developed by Hackman and Oldham, is an instrument designed to measure the following classes of variables: (1) objective job characteristics, particularly the



degree to which jobs are designed so that they enhance work motivation and job satisfaction; (2) personnel affective reactions of individuals to their jobs and work setting; (3) the readiness of individuals to respond positively to "enriched" jobs--jobs with high potential for generating internal work motivation. Based on a specific theory of how jobs affect employee motivation, the JDS is intended to: (1) diagnose existing jobs to determine if (and how) redesigning could improve employee productivity and satisfaction; and (2) evaluate the effect of job changes on employees--whether the changes derive from deliberate "job enrichment" projects or from naturally occurring modifications of technology or work systems. The JDS has gone through three cycles of revision and pre-testing. Reliability and validity data are summarized for 658 employees in 62 different jobs in seven organizations who have responded to the revised instrument (Hackman and Oldham 1975). The short form of this instrument was utilized in this study. Secondary data were obtained from previous research.



Table 1. Means for the Bank in Guatemala and Nicaragua

Dimension	Bank in	Bank in	Variance
	Nicaragua	Guatemala	
Skill Variety	3.77	.06	
Task	3.01 3.35		34
Identity			
Task	2.5	3.10	6
Significance			
Autonomy	2.86	2.72	.14
Feedback	3.5	3.48	.02
Motivating	31.79	32.05	26
Potential			
Score			



Table 2. Means for The Studies in the Service, Manufacturing, Retail and Manufacturing

Dimension	Hospital	Retail	Manufacturing	Mean	Mean for	Bank in	Bank in
	(Service)			for Sales	Manufacturing	Nicaragua	Guatemala
				Industry	Industry	(Service)	
Skill Variety	4.05	4.46	4.89	4.80	4.2	3.77	3.71
Task Identity	3.89	5.25	3.94	4.4	4.3	3.01	3.35
Task	4.48	5.59	5.31	5.5	5.3	2.5	3.10
Significance							
Autonomy	3.56	5.3	4.67	4.80	4.5	2.86	2.72
Feedback	3.36	4.05	4.07	4.44	4.7	3.50	3.48
Motivating	49.52	109.47	89.59	104.52	97.29	31.79	32.05
Potential							
Score							

Conclusions

In the study of four industries, the researchers found there was a marginal relationship with respect to skill variety, task identity, task significance autonomy and feedback when evaluating the service, manufacturing, retail and a bank in Guatemala. The survey also found a significance variance in the scores of the companies surveyed in the United States and the two banks in Nicaragua and Guatemala. It appeared there may be a cultural issue.

Recommendation for Future Research



The researches recommend additional research be done to determine if there culture is playing a part in

the variations of the scores, and the instrument be tested in other industries and countries.

References Available Upon Request



HI-TECH COMPANY IMAGE: THE CONSTRUCT AND ITS MEASUREMENT

Jerome Christia Dep't of Marketing/Management/Resort Tourism Coastal Carolina University Conway, SC 29528 christia@coastal.edu

> Kevin E. Voss Department of Marketing Oklahoma State University Stillwater, Ok, 74078 <u>Kevin.voss@okstate.edu</u>

Gary L. Frankwick Department of Marketing Oklahoma State University Stillwater, Ok, 74078 gary.frankwick@okstate.edu

Tom J. Brown Department of Marketing Oklahoma State University Stillwater, Ok, 74078 tom.brown@okstate.edu

Abstract

Company image is what sticks in the minds of existing and potential customers. Company image simplifies the mental processing for customers when evaluating products, brands, stores, and companies. In consideration of today's advances in technology, this paper sought to reveal a method of assessing mental images of the companies providing these products and services. Hi-tech companies are prominently represented in the top ten most successful companies. The purpose of this study was to develop a scale to measure hi-tech company image. An 18-item scale was generated and reduced to a 2-dimensional 5-item scale to measure hi-tech company image. The scale was tested and showed evidence of nomological, criterion-related, convergent and discriminant validity. The scale was also tested for dimensionality and reliability. The new hi-tech company image scale was created for this



study through several iterations using a series of analytical tools and processes. A definition for the hitech-image construct was presented based on careful research of extant academic and practitioner literature. This study provides limitations to this research, offers managerial implications, and future areas of study based on the findings.

Keywords: Hi-tech, Company image, Scale development

Hi-Tech Company Image: The Construct and Its Measurement

An often underappreciated variable in the market success equation is the concept of company image. Yoon, Guffey, and Kijewski (1993) asserted that company image and reputation influence buyers' expectations and purchase intentions. Tech companies account for a significant of total spending in business. Eight of the top 10 spenders are technology companies, including the top three, in order: IBM Corp., AT&T, and Microsoft. Recently, high-technology ad spending among the top 100 grew by 21 %. New technologies have increased the capacity to target markets that were previously difficult to reach. Therefore, certain hi-tech companies are able to garner a pioneering advantage in historically unprofitable markets. Furthermore, people buy brand products not only because of their inherent qualities, but also because of a bias, a disposition toward products of selected organizations. Consequently, the image of the organization affects people's selection or rejection of the products.

The Hi-Tech Company Image

In a seminal paper on corporate image, Martineau (1958) suggested the existence of multiple corporate personalities. Since an image is the total impression an entity makes on the mind of others, it can be applied to anything, a physical object as well as an intangible concept (Dichter, 1985). In this study, we define hi-tech company image as the way people view companies that employ the most advanced technology currently available.

Method



Because the hi-tech company image construct has not been previously addressed in the marketing literature, we set out to develop a reliable, valid, parsimonious, and generalizable scale. Following accepted scale development procedures (e.g., Churchill, 1979, Gerbing & Anderson, 1988), we began with an item pool representing the domain of interest and winnowed this set down to three items. Our development process includes tests of unidimensionality, reliability, discriminant and nomological validity, and criterion-related (predictive) validity. This scale development process, which includes elicitations, pre-tests, and two studies, is described in this study.

Our item generation procedure involved three steps. First, since hi-tech company image is similar to, but distinct from the well-known company image construct, we included the items from Tucker's (1961) eleven-item company image scale. Our second step involved an elicitation process in which twenty-four subjects were tasked with brainstorming adjectives. As the third step in the process, we tested 18 items with a new sample of 23 subjects. These subjects did not participate in the previous phases of the process.

We calculated coefficient alpha as recommended in the scale development literature (Churchill 1979). In an exploratory factor analysis, we found that, for all three firms, a two-factor solution emerged and this was clear from even the unrotated solution. These solutions all had the conservative/progressive, conventional/extraordinary, and traditional/innovative items loading on one factor while the remaining items (follower/pioneer and laggard/leader) loaded on the second factor.

We next set out to examine the unidimensionality and construct validity by fitting a confirmatory factor model in LISREL 8 (Jöreskog & Sörbom 1996). The two-dimensional multiple groups model fit well. However, since the data are all generated from the same scales on different target companies, we would like for the identical factor structure to apply. Hence, we fit a single CFA model pooling the data into a single group. This model fits the data extremely well. The completely standardized factor



loadings, reliabilities, and average variance extracted (Fornell & Larcker, 1981) are shown in Table 3. Based on these results, we determined that our two-dimensional scale of hi-tech company image possessed both adequate reliability and dimensionality.

Table 3: Confirmatory Factor Analysis

Scale Anchors	Innovative	Leadership			
conservative/progressive	0.82				
conventional/extraordinary	0.86				
traditional/innovative	0.85				
laggard/leader		0.95			
follower/pioneer		0.86			
Average Variance Explained	0.71	0.82			
Reliability	0.88	0.90			
Coefficient Alpha	0.88	0.90			
Model Fit: $\chi^2 = 3.94$, 4 <i>df</i> , p = .41, GFI = .99, NFI = NNFI = 1.0					

Discussion

Managerial Implications

Given the intense competition in most markets today, companies that fail to develop new products are exposing themselves to great risk. Their existing products are vulnerable to changing consumer needs and tastes, new technologies, shortened product life cycles, and increased domestic and foreign competition (Kotler, 1994). The research questions raised by this study encompass a number of practical concerns. Unavoidably, dilemmas exist in all industries. This study developed a two-dimensional scale to measure hi-tech company image. The study has relevance for innovative consumer behavior, organization image, alliances, and new product development.

Theoretical Implications

The propensities of consumers to adopt novel products, whether they are ideas, goods, or services, can play an important role in theories of brand loyalty, decision making, preferences, and communication . Researchers should consider support for hi-tech company image with other theories, since this construct



has implications for theory building with other constructs. There are research implications for studies of cognitive structures and information processing.

This study developed a short, valid, and reliable scale to measure hi-tech company image. This bidimensional scale allows researchers to follow a developmental process to create new survey instruments for other studies. Also, this shows evidence that it is possible to manipulate company image based on public perception of the innovativeness of the company. A brief description entailing a company's history, analysis, and rating provided an effective method of eliciting consumer opinion regarding their perception of a company, its image, and the potential development of a new product.

Limitations

There were a few shortcomings associated with this study. First of all, only the electronics industry was used to represent hi-tech companies. The study did not consider pharmaceutical, aircraft, medical, telecommunications, or other hi-tech industries recognized by the Organization for Economic Co-operation and Development.

Future Research

There are several opportunities for future research based on this study. If replicated and extended in future research, the results of this study offer supportive evidence that should progress marketing research toward a resolution of the inconsistencies found in company image literature. Adequate theoretical support should prompt the evaluation of constrained and unconstrained alternatives of the model specified in this study using more constructs. In the marketing literature, there are several types of risk, among them are: financial, time, opportunity-loss, social, physical, psychological, and performance. Isolating specific types of risk should prove beneficial for marketing researchers and practitioners.

References

47



Dichter, E. (1985). What's in an image. *Journal of Consumer Marketing*, *2*, 75-81.

- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *28*, 39-50.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale developmentincorporating unidimensionality and its assessment. *Journal of Marketing Research*, *25*, 186-192.

Jöreskog, K., & Sörbom, D. (1996). LISREL 8: User's Reference Guide. Chicago, IL: SSI.

Kotler, P. (1994), *Marketing Management*, Englewood Cliffs, NJ: Prentice Hallrtineau, P. (1958). Sharper focus for the corporate image. *Harvard Business Review*, *36*, 49-58.

Martineau, P. (1958). Sharper focus for the corporate image. *Harvard Business Review*, 36, 49-58.

Yoon, E., Guffey, H. J. & Kijewsky, V. (1993). The effects of information and the company reputation on intentions to buy a business service. *Journal of Business Research*, *27*, 215-28.



ECONOMIC VALUE ADDED

Stanley Chu Borough of Manhattan Community College 199 Chambers Street New York, N.Y. 10007 <u>schu@bmcc.cuny.edu</u>

Harvey Man Borough of Manhattan Community College 199 Chambers Street New York, N.Y. 10007 <u>hman@bmcc.cuny.edu</u>

Abstract

Economic value added(EVA) is a popular performance metric used by companies and their consultants In recent years, it has been popularized and trademarked by the consulting firm of Stern, Stewart & Co. EVA, previously called residual income, equals operating profit less the cost of all capital employed to produce those earnings. The formula shows a straightforward logic. A business owner uses his/her own equity and borrowed money to buy assets. Both the owner and the lender require a rate of return on their money (together they represent the cost of capital). The assets purchased(total capital) generate aftertax operating profits. No value is added unless the operating profits exceed the dollar return required by the owner and the lenders. This paper explains how EVA is calculated and explains how it can help a company.

Keywords: Economic value added

Introduction

(Harper, 2005) points out the need to understand the difference between a performance metric from a wealth metric. A performance metric is a metric under the control of the company such as net income or return on capital. A wealth metric, in contrast, is a measure of value that depends on the stock market's view of the company. An example of a wealth metric would be a stock's market capitalization or a company's Price-Earnings Ratio (Market price divided by Earnings per share). Every performance



metric has a corresponding wealth metric. For example, earnings per share is a performance metric and the P/E ratio is its corresponding wealth metric. The variables which determine earnings per share (net income and common shares outstanding) are affected only by the company's actions and decisions. On the other hand, the P/E ratio depends on the value of these actions and decisions assigned by the stock market. EPS is current (or historical) but the P/E Ratio is forward-looking. A company can influence the P/E ratio but cannot fully control it.

EVA is a performance metric since the variables of operating profit and the cost of capital are affected only by the company's actions. The corresponding wealth metric for EVA is MVA. MVA stands for **market value added**. It is calculated by comparing the total market value of a company's stock with the recorded amounts for total stockholders' equity and liabilities. According to the Stern Stewart Performance 1000 report for the year 2000, the Microsoft Corp. was the leader with a MVA of \$629 million. General Electric was second with a MVA of \$467 million. In effect, it shows the difference between what the investors put in (equity and debt) with what they can take out(the market value of the company's stock) (Stewart, 1994) stresses the need for managers to understand that maximizing the stockholders' equity is not the same as maximizing a company's total market value. For example a company could increase its total stockholders' equity by simply issuing additional capital stock.. The author emphasizes the need to focus on maximizing the **difference** between the firm's total market value and the total capital that investors have committed to it. In other words its MVA. The focus of management should be on maximizing the MVA. (Dierks & Patel, 1997) states that if MVA is a positive number, the company has made its shareholders richer. A negative MVA indicates how much shareholders' wealth has been destroyed.

EVA is the key to maximizing MVA (Stewart, 1994). EVA measures the wealth a company creates **each year**. EVA focuses on the concept that a company must earn an adequate risk-adjusted rate return on its

50



investments in assets. EVA measures the amount of income that exceeds the risk-adjusted cost of the investment(cost of capital) .If EVA is zero, a company is earning a return from operations that is just sufficient to pay investors their required rate of return. A negative EVA indicates that a company is not earning a return sufficient to compensate investors for risk. The key to increasing EVA is consistently investing in projects that earn more than their cost of capital. (Tully, 1994) cites a comment from the Coca-cola CEO, Robert Goizueta., who states that you only get richer if you invest money at a higher return than the cost of that money to you.

Even though EVA is based on residual income, it is grounded in the theory of finance. Finance/investment theory suggests that the acceptable rate of return of an investment project should be greater than the risk-adjusted return required by investors. In addition, the present value of the expected cash flows of the investment, discounted at the risk-adjusted rate of return, should be greater than the cost of the investment.

The calculation of EVA involves some key departures from traditional accounting. (Harper, 2005) states that there are three main ideas when computing EVA:

- 1. Cash is king. It will be necessary to convert operating profit prepared under GAAP/accrual basis to the cash basis.
- 2. Some items that are considered expenses according to GAAP are viewed as investments in assets. For example, for GAAP purposes, Research & Development Costs are generally expensed as incurred. In the determination of EVA, R&D costs are capitalized and amortized over a certain time period, such as five years. (Atkinson, Kaplan, Matsumura, & Young, 2007) state that the reason for the adjustments from GAAP is to develop an income number that better reflects the organization's long-run earnings potential.
- 3. Equity capital is expensive. A capital charge must be deducted.



(Weaver, 2001) points out the basic formula for EVA is: Net Operating Profit After Tax **(NOPAT**) Less: Capital Charge (Cost of Capital X **Invested Capital**) Equals: Economic Value Added

There is the potential for up to 164 adjusting items. (Stewart, 1994) Stern Stewart & Co. a consulting company that owns the EVA trademark states that most companies may only need to make 5-10 adjustments. When considering the number of adjustments the user's priority should be on consistency and comparability (Harper, 2005). The next section of this paper will discuss the uses of EVA.

How Can EVA help your company?

According to Stern Stewart & Company web site <u>www.eva.com</u> there are four M's of EVA:

1.Measurement. EVA is an accurate measure of corporate performance over any given period of time. It tells managers how they are performing.

2. Management system. EVA serves as a foundation for a comprehensive financial management system that encompasses all the policies, procedures, methods, and measures that guide operations and strategy. Managers are aware of the three basic ways to increase value:

- Increase the returns from assets already in the business.
- Invest additional capital as long as expected returns exceed the cost of capital.
- By selling assets that are worth more to others and by increasing efficiency.

3. Motivation. EVA users can design bonus systems that cause managers to think and act like owners. Under an EVA bonus plan, the only way managers can make more money for themselves is by creating even greater value for the shareholders.



4. Mindset. With the EVA financial management system and EVA bonus system in place a company can transform it corporate culture. EVA can facilitate communication and serve as a focal point for decision making.

(Atkinson, Kaplan, & Young, 1995/2004) states that it is possible to compute the EVA for every major product and product line to evaluate a product line's contribution to creating shareholder wealth. In addition, organizations are beginning to use EVA to identify products or product lines that are not contributing their share to organization return, given the level of investment required.

(Dierks & Patel, 1997) states that EVA should not be viewed as the answer to all things. By itself, EVA does not solve problems; managers must solve them. But having access to such a meaningful measure that is linked strongly to share price performance clarifies a manager's options and in conjunction with MVA, provides a meaningful target to pursue for both internally and externally oriented decisions.

References

Atkinson, A., Kaplan, R., & Young, S. (2004). *Management Accounting* (4th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall. (Original work published 1995)

Four M's of EVA. Retrieved December 8, 2009, from Stern Stewart & Co Web site: <u>http://www.eva.com/</u> evaabout/fourm.php

Roll.R. (2005, March). Future Shock. CFO Magazine.

- Beneda, N. (2004). Valuing Operating Assets in Place and Computing Economic Value Added. *The CPA Journal*, *37*(11), 56-63.
- Weaver, S. (2001). Measuring Economic Value Added: A Survey of the Practices of EVA Proponents. Journal of Applied Finance, 11(1), 50-60.
- Harper, D. (Ed.). (2005). *Understanding Economic Value Added*. Retrieved March 4, 2010, from Investopedia.com Web site: <u>http://www.investopedia.com/university/EVA/</u>



Dierks, P., & Patel, A. (1997). What is EVA, and How Can It Help Your Company? *Management Accounting*, *79*(5), 52.

Tully, S. (1994, November 28). America's best wealth creators. *Fortune*, 130(11), 143.

Atkinson, A., Kaplan, R., Matsumura, E., & Young, S. (2007). *Management Accounting* (5th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.

Stewart, B. (1994). EVA: Fact and Fantasy. *Journal of Applied Corporate Finance*, 7(2), 71-84.

Harper, D. (Ed.). (2005). Understanding Economic Value Added. Retrieved March 4, 2010, from http://

www.investopedia.com/university/EVA/

Epstein, M., & Young, D. (1999). 12.3 "Greening" with EVA. Management Accounting, 94(5), 45-49.



EEDA: THE IMPLICATIONS FOR THE SIXTEEN TECHNICAL/COMMUNITY COLLEGES IN SOUTH CAROLINA

Frederick Cooper Spartanburg Community College Mathematics Instructor Clemson University Higher Education Concentration Spartanburg, SC 29301 <u>fcooper@clemson.edu</u>

Abstract

The General Assembly of South Carolina radically changed the structure of secondary education with the enactment of the Education and Economic Development Act (EEDA) of 2005. Part of the legislation required post secondary institutions to develop articulation agreements with secondary institutions in their service area(s). Using the idea of path dependence, an argument is presented that the phenomenon of EEDA sped the technical colleges down the road towards articulation with secondary institutions. A historical look at the history of the technical college system in South Carolina indeed shows the increasing path towards articulation.

Keywords: Path dependence; EEDA; Articulation agreements

Introduction

In 2005, business, community, and education leaders in South Carolina came together to solve a serious problem in secondary education. Business leaders complained recent high school graduates did not have the requisite skills to compete in the new global economy. Community leaders shared similar concerns about the deficiencies of high school graduates. Their main concern was the lack of skilled labor would increase the unemployment rate and adversely affect the economy. Higher education officials expressed frustration about the increasing numbers of students enrolling in one or more developmental courses. This was especially evident in the state's sixteen community/technical colleges.



There are fifteen technical colleges and one community college by name (Spartanburg Community College).

The three groups brought their concerns to the state's General Assembly. The result of their collaboration with lawmakers was the Education and Economic Development Act (EEDA). The EEDA legislation was signed into law by Governor Mark Sanford on May 27, 2005. EEDA radically changed the structure of secondary education in South Carolina. High school curriculum would be developed around a career cluster system. In addition to the curriculum redesign, students would receive individualized educational, academic, and career oriented choices and greater exposure to career information and opportunities.

The purpose of this paper is to describe Section 59-59-210 of the EEDA legislation and its effects on the sixteen community/technical colleges in South Carolina. The aim is to give higher education administrators insight on possible ways to approach articulation agreements with high schools.

Section 59-59-210 of the EEDA legislation reads as follows:

(A) By September 2005, the Commission on Higher Education shall convene the Advisory Committee on Academic Programs to address articulation agreements between school districts and public institutions of higher education in South Carolina to provide seamless pathways for adequately prepared students to move from high school directly into institutions of higher education. The committee shall review, revise, and recommend secondary to postsecondary articulation agreements and promote the development of measures to certify equivalency in content and rigor for all courses included in articulation agreements. The advisory committee shall include representatives from the research institutions, four year comprehensive teaching institutions, two year regional campuses, and technical colleges. The committee, for purposes pursuant to this chapter, shall include representation from the



State Department of Education, and school district administrators, to include curriculum coordinators and guidance personnel.

(B) By July 2006, the Advisory Committee on Academic Programs shall make recommendations to the Commission on Higher Education regarding coursework that is acceptable statewide for dual enrollment to be accepted in transfer within a related course of study. Dual enrollment college courses offered to high school students by two year and four year colleges and universities must be equivalent in content and rigor to the equivalent college courses offered to college students and taught by appropriately credentialed faculty. Related policies and procedures established by the Commission on Higher Education for dual enrollment and guidelines for offering dual enrollment coursework and articulation to two year and four year colleges and universities for awarding of credit must be followed.

As stated above, EEDA calls for increased collaboration between secondary and postsecondary education institutions. The official name for the implementation process is the Personal Pathways to Success. The primary means for collaboration is through articulation agreements. A concrete definition of articulation is needed first. Robertson-Smith (1999) defines articulation as the process of coordinating curricula at different levels of education in order to foster the efficiency and effectiveness of the educational process. The coordination of curricula may take place on a variety of levels. For example, there are 2+2 dual enrollment models in which high school students may receive college credit for coursework taken during the last two years of high school that may transfer to a two year college (Mosholder & Zirkle, 2007). An alternative involve students attending a two year college and receiving an associate's degree and transferring to four year university to complete the last two years of a baccalaureate degree. One other alternative is the 2+2+2 model in which there is a seamless pathway developed between high schools, two year colleges, and four year universities that lead to the attainment of a baccalaureate degree.



Before a discussion may commence about articulation, some background about the new high school curriculum should be given. In the 8th grade, students in consultation with parents and guidance counselors will develop an Individual Graduation Plan (IGP). An IGP is a plan of study in which students' high school coursework is designed around the sixteen career clusters. The career clusters of study are based upon the national career clusters and may include agriculture, food, and natural resources; architecture and construction; arts, audio video technology, and communication; business, management, and administration; education and training; finance; health science; hospitality and tourism; human services; information technology; law, public safety, and security; manufacturing; government and public administration; marketing, sales, and service; science, technology, engineering, and mathematics; and transportation, distribution, and logistics. The student's program is expected to lead to either a form of certification that may used to obtain gainful employment in the student's chosen cluster or college credit towards matriculation to some form of higher education. This model is based upon the High Schools That Work (HSTW) model. The High Schools that Work model provides a closely monitored framework of goals and key practices to accelerate learning, which includes rigorous academic standards and out of classroom learning opportunities.

Theoretical Framework

Path dependence is a relatively new term in social science lexicon. Its meaning has not been clearly defined. The ambiguity in its meaning typically fluctuates from a broader to a narrower conception. William Sewell defines path dependence as "that what happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point in time" (Pierson, 2004). Another narrower conceptualization of path dependence has been offered by Margaret Levi: Once a country or region has gone down a path, the costs of reversal are very high. Other choice points may be available, but the entrenchments of certain institutional arrangements obstruct an easy reversal of the



initial choice (Pierson, 2004). The preferred definition of path dependence for use in this paper is dynamic processes involving positive feedback, which generate multiple possible outcomes depending on the particular sequence in which events unfold (Pierson, 2004).

The core idea of path dependence is that historical processes generate positive feedback, also referred to as self reinforcement. Each step in a specific direction makes reversing course more difficult. It is argued that the dynamic properties encompassing path dependence can be described as history acting as an irreversible branching process. With positive feedback acting in the background, the probability of continuing down a current path increases with each step on the path. The reason is the relative benefits of the chosen activity compared with other alternatives increases over time.

There are three reasons the focus on processes exhibiting positive feedback are compelling. First, processes that exhibit positive feedback resemble many important aspects of the social world. Secondly, theories are being developed by social scientists that make studying positive feedback an intriguing area of study. Third, focusing on self-reinforcing, path dependent dynamics is an essential building block for exploring a wide range of temporal processes (Pierson, 2004).

Path dependent processes have found applications in the social sciences. One of the applicable areas is economics. Classical economic theory hypothesized the existence of unique equilibria. The thought is that if there exists unique equilibria, the possibility exists for a predictable, efficient world. Further, this analysis may point to the existence of a single optimal outcome. In addition, economists assumed the existence of decreasing marginal returns, which makes a single optimal outcome attainable. If true, then economic actions exhibit negative feedback, which leads to a predictable equilibrium. As a result, negative feedback tends to stabilize the economy because any major changes will be offset by the very reactions they generate. Equilibrium represents the best outcome possible under the circumstances: the most efficient use of and allocation of resources (Pierson, 2004).



However, over the last twenty years, the decreasing returns argument has faced a mounting challenge. Economists are beginning to embrace the idea of increasing returns. Increasing returns mean each increment added to a particular line of activity yields larger rather than smaller benefits. This idea is not a new concept in the research literature. Path dependence ideas have become prevalent in areas like the spatial location f production, the development of international trade, the causes of economic growth, and the emergence of new technologies.

Path dependence arguments have found traction in politics as well. Several aspects of politics make positive feedback possible: (a) the central role of collective action; (b) the high density of institutions; (c) the possibilities for using political authority to enhance asymmetries of power; and (d) its intrinsic complexity and opacity (Pierson, 2004).

In politics, there are good reasons to believe positive feedback processes are widespread. These processes are characteristic in institutional development, collective action, the exercise of authority, and the emergence of understandings of the political world. As a result, some important theoretical implications arise. First, path dependent arguments point to the importance of sequencing (Pierson, 2004). The implication is path dependent processes imply history matters. Early events in a sequence will have more importance than those occurring later in the sequence. A crucial implication is early stages in a sequence can place particular aspects of political systems onto distinct tracks which are reinforced through time. A second reason is focusing on path dependent processes suggest the importance of developing analyses that may include long stretches of time. A third reason is path dependent arguments provide a counter to functionalist explanations of simple cause and effect outcomes. Functionalists may take the form of suggesting that a specific outcome X (an organization, policy, or institution) exists because it serves a function Y. Having the possibility of path dependence requires the study of history, if only to evaluate the validity of functionalist assertions (Pierson, 2004).



An informal survey was conducted with the sixteen technical/community colleges in South Carolina. A list of eight questions was submitted to the Chief Academic Officer of each college. For the purposes of this article, only one of the questions will be examined. Of the sixteen technical/community colleges, seven institutions responded to the informal survey. Two of the institutions that responded represented the largest and smallest technical college in South Carolina. The one question of particular interest in the survey was "What are the challenges and successes you have experienced in the implementation process?" From the responses received, one common answer emerged as a success in the implementation process. All responders reported as a success improved communication between the institution and the school districts in its service area. There were no consensus challenges presented from the responding colleges. Three of the colleges reported that scheduling conflicts for various activities proved challenging in the implementation process. One institution reported a challenge in getting all stakeholders to buy into the EEDA legislation. Another institution reported a challenge in attempting to satisfy the diverse interests of the four school districts in its service area. As an aside, the largest and smallest technical colleges reported only one school district in its service area. One institution reported no challenges in the implementation process. One institution reported one of its challenges as the difficulty of getting faculty and staff on both ends to buy into the implementation process.

Based upon the results, some interesting hypotheses may be made. With EEDA being a new phenomenon in education, it may some time for all stakeholders to fully understand and accept it. The fact that some faculty in both high school and higher education do not want to work with the other is not surprising. From the secondary aspect, being a loosely coupled system makes constant change likely. Some may look at EEDA as the latest "fad" which may last until the next new innovation. In

61



addition, reluctance to work together may be a sign of the territorial conflicts that may arise between the two entities.

Dealing with multiple constituents with varying needs can be a difficult proposition. Each articulation in such case would be handled differently on a case by case basis. Another complication in dealing with school districts can be competing interests. For example, articulation may face considerable opposition from schools that traditional have strong Advanced Placement (AP) programs. The fear is that dual enrollment may adversely affect the strength of a high school's AP program. In 2006, 22.0% of South Carolina high school students took an AP exam before graduation compared to 24.2% nationally. Of those students, 56.9% of South Carolina students taking AP exams in 2006 scored a 3 or higher compared to 61.0% nationally (College Board, 2007). The numbers suggest fears may be a bit exaggerated. One of the goals of dual enrollment is to give access to postsecondary education that may otherwise not have an opportunity.

The EEDA legislation is a new innovation in South Carolina education that changed the curriculum structure of secondary education. As part of the change, secondary and postsecondary education entities are forced to forge partnerships in the name of student achievement. Partnerships have formed on various levels from aiding the high schools in designing curriculum around the national career clusters to developing articulation agreements to aid in student transition from secondary to postsecondary education. Along the way, South Carolina's technical/community colleges have experienced successes and challenges in fully implementing the legislation. This paper discussed some of the challenges facing technical colleges in implementing the legislation. With the literature limited in discussing high school and two year college articulation, a new area of research is readily available to be explored. This is especially important with an environment of decreasing state appropriations and higher expectations for the state's technical colleges.



References Available Upon Request



INCREASING RETENTION AMONG PSYCHOLOGY MAJORS: CREATING A BIOECOLOGICAL PROGRAM

Kristi Cordell-McNulty Department of Psychology, Sociology, & Social Work Angelo State University San Angelo, TX 76909 kmcnulty@angelo.edu

Abstract

College retention is a major problem in the United States. This research focuses on a program that is being developed and tested to increase college retention among freshmen psychology majors. The ultimate goal of this program is to increase college retention. To meet the ultimate goal of retention, there are three smaller goals, to help incoming psychology majors develop a sense of belonging and institutional commitment to the university, to give incoming psychology majors easier access to faculty and resources, and to encourage positive academic motivation, self-regulation, and study skills for incoming psychology majors. This program is based upon Bronfenbrenner's (1979, Bronfenbrenner & Morris, 1998) bioecological systems model and is attempting to move research and theory into practice. Participants will be freshmen psychology majors entering college in the fall of 2010.

Keywords: College, Retention, Motivation, Sense of belonging, Social support

Introduction

The graduation rate of college students in the United States remains a serious national concern. Only 56.4% of the students entering college in Fall 2000 had graduated by Summer 2006 (National Center for Higher Education Management Systems, 2007). The purpose of this study is to test a new program designed to increase retention based on a bioecological perspective. The ultimate goal of this program is to increase college retention. In addition, this program will meet the ultimate goal of retention by addressing three smaller goals, to help incoming psychology majors develop a sense of belonging and institutional commitment to the university, to give incoming psychology majors easier access to faculty



and resources, and to encourage positive academic motivation, self-regulation, and study skills for incoming psychology majors. These three goals were chosen because research has shown they are related to positive college outcomes.

Theoretical Framework

This program intends to increase retention within the psychology major and persistence to graduation by focusing on two ecological systems: the college microsystem and the self-system. The program is based upon Bronfenbrenner's (1979, Bronfenbrenner & Morris, 1998) bioecological systems model. Bronfenbrenner described spheres of environmental influences in his theory including the microsystem and self-system. The microsystem includes activities, roles, and relationships that tend to occur on an everyday, face-to-face basis. The self-system emphasized examining people's characteristics and how they influence the environment. The purpose of this program is to focus on increasing retention through both the college microsystem and the self-system. Within the college microsystem this program will focus on fostering a sense of belonging to the campus community, positive peer and faculty relationships, and encouraging participation in extracurricular activities to meet the first and second goals of the program. Within the self-system the program will focus on developing positive motivation, self-regulation, and study skills to meet the third goal of the program.

Overview of the Program

To achieve the first goal, to help incoming psychology majors develop a sense of belonging and institutional commitment to the university, incoming psychology majors will be placed into cohorts for their required General Psychology and Public Speaking courses. This will continue in the spring semester with Developmental Psychology and possibly other required courses. Placing the students in cohorts will create learning communities and allow them to form bonds with their fellow majors more easily, and I hypothesize will increase sense of belonging. In addition, incoming psychology majors will be assigned



an undergraduate student mentor. This mentor student will be required to contact the students a minimum of twice a month during the fall semester. Mentor students will encourage first year students to get involved in campus activities and events. Forming a bond with a mentor student will offer another source of social support for incoming students and I hypothesize will increase sense of belonging. Finally, the faculty advisor for freshmen will send weekly emails, updating students about on-campus events and activities. Special events will be held throughout the semester for psychology majors. These events will include presentations by the library, career center, writing center, counseling center, etc., and encouraging students to attend cultural, social, and athletic events on campus and in the community. Some of these events will be sponsored by the Psychology Club and will be career oriented (i.e., so you want to be a sports psychologist) and others will be department oriented (i.e., come meet your psychology professors) Encouraging the students to become involved I hypothesize, will increase sense of belonging and institutional commitment.

To achieve the second goal, to give incoming psychology majors easier access to faculty and resources, all incoming psychology majors will be assigned to the faculty advisor for freshmen. This will give students a faculty contact point so they may ask questions at any point during the semester. The faculty advisor for freshmen will meet with each student at least twice during the fall and spring semesters. The advisor will answer any questions, assist with registering for classes, assess the student's progress, and offer help, suggestions, or referrals if needed.

To achieve the third goal, to encourage positive academic motivation, self-regulation, and study skills for incoming psychology majors, prior to the beginning of the semester, incoming students will take a survey of motivation, self-regulation, and study skills to assess their current levels. These measures may be used to identify students who are at risk and to create programs throughout the semester that will help increase motivation. At the end of the fall and spring semesters freshmen will take another survey



(similar to the original) to assess their progress. Additionally, each undergraduate student mentor will lead a study group once a week. These study groups will encourage students to study and review together for their psychology classes and other classes they may be taking. This will provide incoming students with a positive model for studying and encourage self-regulation as the semester continues.

Proposed Methodology

Participants will be freshmen psychology majors entering college in the fall of 2010. Participants completed surveys about their motivation, self-regulation, study skills, and career goals during freshmen orientation. This data was used to assign students to an upperclassmen mentor and design motivation, self-regulation, and study skills interventions tailored to the needs of the incoming class of freshmen. Freshmen will be interviewed throughout the fall semester about their college experiences and data will be collected at the end of the fall and spring semesters to determine the effectiveness of the program.

References

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.
- Bronfenbrenner. U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1* (5th ed., pp. 993-1028). New York: Wiley.
- National Center for Higher Education Management Systems. (2007). *Graduation rates: Six year graduation rates of bachelor's students – 2006*. Retrieved March 24, 2008 from http://www.higeredinfo.org/dbrowser/index.php?level=nation&mode=map&state=0&submeas ure=27.



DOES THIS BOOK MAKE ME LOOK FAT? CREATING POSITIVE IMAGERY WITH GIRLS THROUGH LITERACY AND CLASSROOM PRACTICES

Carolyn D. Corliss Physical Education and Exercise Science Auburn University Montgomery Montgomery, Alabama 36124 <u>ccorlis2@aum.edu</u>

Shelly H. Bowden Early Childhood, Elementary, and Reading Auburn University Montgomery Montgomery, Alabama 36124 <u>shudsonb@aub.edu</u>

ABSTRACT

There is no doubt young girls in our classrooms have given thought of body image, with good reason. Overweight status in children and adolescents has reached epidemic proportions in the United States, more than doubling since 1980 with one in every seven affected by this trend (National Center for Health Statistics, 2000). To compound the problem, technology, specifically MTV and the Internet bombard media and project perfect body images of girls and women. This article presents first an annotative bibliography of books to incorporate into your classroom library to help girls with positive body image. Finally, websites for further study are offered.

Key Words: Body image, adolescent overweight status

Introduction

There is no doubt young girls in our classrooms have given thought to body image, with good reason. Overweight status in children and adolescents has reached epidemic proportions in the United States, more than doubling since 1980 with one in every seven affected by this trend (National Center for Health Statistics, 2000). To compound the problem, technology, specifically MTV and the Internet bombard media and project perfect body images of girls and women. A Goggle search containing the words "girls and body image," resulted in 44, 600, 000 websites.



Overweight conditions are estimated by the age and sex specific 95th percentile of body mass index (BMI). Children and adolescents between the 85th and 95th percentiles of BMI are described as at risk for overweight. Children and adolescents at or above the 95th percentile are considered overweight. Currently and nationwide, 15.4 percent of children and adolescents are considered to be at risk for overweight (Center for Disease Control, 2006). Among girls, African Americans (21.2%) ranked highest of being at risk for overweight while Caucasians rank 13.8 percent. African Americans (15.6%) also ranked highest in overweight. The incidence and prevalence of overweight conditions are increasing despite efforts to prevent and treat this condition (Berkowitz & Stunkard, 2002) and technology continues to add to and hinder girls' images of their bodies (Christakis, Zimmerman, DiGiuseppe, & McCarty, 2004).

This article presents first an annotative bibliography of books to incorporate into your classroom library to help girls with positive body image, and then suggests ways to get not only girls, but all students moving throughout the daily classroom schedule. Finally, websites for further study are offered.

Positive body image books for girls

Bolden, T. (1998). *33 Things Every Girl Should Know: Stories, Songs, Poems, and Smart Talk by 33 Extraordinary Women*. New York: Random House. *33 Things Every Girl Should Know* engages girls in building self esteem. The poems, stories, essays, and memoirs, which are written by women, offer advice helping young girls to be more confident while giving them a positive outlook on life. The message to the reader throughout this book emphasis 'be true to yourself and follow your personal dreams.' Other topics include dealing with overcoming and winning the battle of physical challenges, combating and addressing our "thin is beautiful" culture, and dealing with insensitive people. This book speaks with a true voice that will be easily heard and understood by adolescents.



Devillers, J. (2002). *Girl Wise: How to Be Confident, Capable, Cool, and in Control* New York: Three Rivers Press. Devillers recommends this book for girls grade 8 and up, understanding teenage girls deal with issues ranging from trivial to more serious. A series of topics including becoming confident and independent with attitudes are explored. This book also covers issues such as finding your "own style" instead of falling into the "fashion trap," dealing with rejection, and taking care of your body through sensible eating habits and exercise.

Ford, A., & Berning, S. (2000). *Be True to Yourself: A Daily Guide for Teenage Girls*. Toronto: Publishers Group West. Amanda Ford, (author) recently emerging from the teenage years herself, saw the need to guide girls to think for themselves. She offers support to teenage girls with body image, dating, and fighting with their parents, who in their daughter's eyes and at this stage in their life may seem "out of touch." Encouragement, suggestions, and insights are also given on how to handle fears and frustrations.

Gray, H., & Phillips, S. (1998). *Real Girl Real World: A Guide to Finding Your True_Self.* Toronto: Publishers Group West. Because society often sends mix messages to teenage girls concerning their outward appearance and how they should act in a given situation, *Real Girl Real World* addresses appearance as represented through the media as well problems of eating disorders. The author puts these issues and many others in proper perspective and helps give teenage girls the ability and tools to choose for themselves. Caution: This book also deals with the topic of safe sex.

Kirberger, K. (2003). *NoBody's Perfect: Stories by Teens about Body Image, Self Acceptance, and the Search for Identity*. New York: Scholastic. Recommended for girls 7th grade and up, *No Body's Perfect* is a collection of poems, stories and essays written by teenage girls and adult women. Many of these stories were written by survivors of eating disorders and deal with self and body acceptance. Since many problems in girl's lives stem from lack of self esteem, the focus is to help teenage girls learn to



accept and appreciate their bodies and find possible answers for personal questions through the experience of other teenagers.

Rutledge, J. (2004). *Dealing with the Stuff That Makes Life Tough: The 10 Things That Stress Teen Girls Out and How to Cope with Them.* New York: McGraw-Hill._*Dealing with the Stuff That Makes Life Tough* suggests ways teenage girls, grades 8-10, can deal with difficult situations such as relationships, drug addiction, body image, and parental divorce. The author approaches each situation by asking the teenage reader to examine ways of taking action and finding ways to respect themselves. Tough topics such as drug and alcohol use are seen as pressures which are too great for some to figure out independently, therefore, suggestions are given to make wise choices. With each subject, expert quotes, statistics, and toll free numbers are provided for additional resources.

Websites for further study

These websites provide further study of eating disorders, body image, and women's/girl's health.

www.empoweredparents.com (for parents)

www.empoweredkidZ.com (for children)

www.torah.org/learning/women/class13.html

http://jvibe.com/jvibrations/issue4 (for teens)

www.4woman.gov/owh/pub/factsheets/eatingdis.htm

References

Berkowitz, R.I., & Stunkard, A.J. (2002). Development of childhood obesity. In T.A. Wadden & A.J. Stunkard (Eds.), *Handbook of obesity treatment*. New York: Guilford Press.



- Castelli, D. & Erwin, H. (2005). Complex motor task relationships with fitness and physical activity in children. Paper presented at the AAHPERD Convention in Chicago April 2005. Retrieved June 12, 2006, from http://www.actionbasedlearning.com/cgi-bin/article09.pl.
- Center for Disease Control and Prevention. Press Release. (2006). Prevalence of overweight among children and adolescences: United States. Retrieved June 21, 2006 from http://www.cdc.gov.
- Christakis, D.A., Zimmerman, F.J., DiGiuseppe, D.L., & McCarty, C.A. (2004). Early television exposure and subsequent additional problems in children. *Pediatries*, 113(4), 708-713.
- National Center for Health Statistic. (2000). Health, United States, 2006 with adolescents health chartbook Retrieved June 9, 2006 from <u>http://www.cdc.gov/nchs/data/hus/hus00cht.pdf</u>.
- Vygptsky, L.S. (1962). *Thought and Language*. Cambridge, MA: MIT Press.



CULTURAL INTELLIGENCE – A PREREQUISITE FOR INTERNATIONAL BUSINESS SUCCESS

Carole Creque College of Business University of Mary Washington Fredericksburg, VA 22401 <u>ccreque@umw.edu</u>

Doreen Gooden College of Business Administration Florida International University Miami, Florida 33199 <u>djgooden@yahoo.com</u>

Abstract

Cultural intelligence (CQ) has been described as "a person's capability for successful adaptation to new cultural settings, that is, for unfamiliar settings attributable to cultural context". (Earley & Ang, 2003). This fairly new concept seeks to understand how individuals interact effectively in culturally diverse situations. With the advent of globalization, the focus is on transforming the way business is conducted worldwide. Thus, organizations need to attract individuals with an understanding of culture and cultural diversity and necessary skills and abilities to interact with and create sustainable business relations overseas. This study, therefore, seeks to examine the importance of cultural intelligence in establishing successful business ventures overseas. Paige and Martin (1996) found that people who are culturally intelligent are more flexible and more adaptive to different organizational environment.

References Available Upon Request



SELF-DIRECTED LEARNING AND THE IMPACT OF LEADERSHIP: ANALYZING KEYS FOR SUCCESS FROM A COVENANTAL PERSPECTIVE

Dave Duby School of Business Liberty University Lynchburg, VA 24501 dduby@liberty.edu

Kahlib J. Fischer School of Business Liberty University Lynchburg, VA 24501 <u>kfischer@liberty.com</u>

Abstract

The current state of education seems to be begging for visionary changes to truly impact students and prepare them for the future. Self-directed learning models purport to do just that, by preparing students to be self-motivated, lifelong learners. Research has revealed specific leadership attitudes and behaviors that not only encourage self-directed learning, but are also reflected in the covenantal perspective of leadership. Using content analysis, this paper seeks to further explore Duby's (2006) findings, analyzing them within the covenantal construct developed by Fischer (2003), in order to better understand the relationship between effective leadership practice and the covenantal perspective.

Keywords: Leadership, Self-directed learning, Self-directed learning schools, Learner-centered, covenant

Introduction

One of the most exciting developments in education in recent years is the increased emphasis on the self-directed learning model. Though the importance of directing one's own learning is not new, its relatively recent promotion has prompted many educators to look much closer at its many facets—its roots, its processes, and its potential—in order to more clearly define its role in America's classrooms. But what has been missing thus far in the literature is a discussion of how leadership can impact organizational culture, structure and processes to ensure a successful self-directed learning



environment. In 2006, Duby interviewed leaders and teachers of two schools that facilitate self-directed learning to better understand the leadership dynamics necessary for success in such an environment. Duby's initial findings revealed certain leadership practices that helped these schools attain their desired learning outcomes. As a means of further developing those initial findings, this study will reexamine the leadership practices from a covenantal perspective as articulated by Fischer (2003).

Leadership and Self-Directed Learning

Self-directed learning is a unique learning model that emphasizes non-centralized classrooms and participative learning and presents a rich context for reviewing the leadership practices of the selected schools. Early studies by Knowles (1975) suggest that self-directed learning helps students become proactive learners. These findings are consistent with later studies by Pintrich and De Groot (1990) and Dynan, Cate, and Rhee (2008) who also suggested that self-directed learning contributes to higher academic performance. Research has also suggested that self-directed learning processes are necessary for students to develop lifelong learning skills (Lapan, Kardash, & Turner, 2002).

The subsequent analysis and discussion of the data of Duby's study revealed important leadership practices that positively affected teacher autonomy, encouraged participative practices, and revealed servant leadership tendencies. These leadership practices are central to those found in covenantal leadership practices, a perspective described by Fischer (2003) as embracing the processes and attitudes of a healthy organization.

What is Covenant?

The term *Covenantal leadership* was introduced by the author (Fischer, 2003) as a means of articulating a framework of leadership which embraces the structure, process, and attitudes of a healthy leadership team and organization. Furthermore, Fischer sought to use concepts and ideas that were not merely confined to the field of leadership theory/organizational development alone (which often becomes the



victim of fads and passing trends). Instead, the notion of *covenant* was embraced because that term and its related principles have had a significant positive impact upon Western civilization, and more specifically, upon the organizational soundness of American government and politics (2003). The term covenant denotes a mutually agreed upon relationship in which the various members of the party commit to serving and caring for one another in clearly defined ways. Covenant, then, is at its core a relationship. It is this emphasis upon relationships that distinguishes the idea of covenant from other political or social ideas, such as a contract, which generally emphasize just structure (Elazar,1980b). Perhaps the key point about a covenantal relationship is the emphasis upon relationships among autonomous members freely choosing to come together to enter an agreement. As such, the three key concepts associated with this model are noncentralization (empowerment), participatory decisionmaking, and servant leadership.

What the Study Revealed

The review by Duby and Fischer revealed numerous covenantal principles that were demonstrated by the leaders of the case study schools. Specific covenantal ideals included non-centralization, which was demonstrated by the leader's commitment to teacher autonomy and an emphasis on participatory decision-making, in which the school leaders actively sought teacher input in a variety of decisional contexts—especially those that directly affected the teachers. The covenantal principle of shared vision was not only evident, it was actively pursued as each leader sought to cultivate deeper relationships with his faculty. Additionally, the covenantal principle of empowerment was demonstrated by supporting teacher autonomy and by nurturing the teacher's growth. Finally, these leader behaviors were demonstrated within the context of servant leadership—a necessary attitude for effective covenantal practice.

Limitations of the Study and Implications for Further Study



There are some relevant questions that can be drawn from these implications for future study. For instance, are visionary organizations more apt to be motivated by covenantal principles? Though there is some evidence that this type of behavior is found in non-profits, what type of for-profit organizations are more apt to embody the tenets of covenant, and what impact does such behavior have on their bottom-line?

Regarding educational institutions in particular, fostering a love for learning, encouraging independence and initiative, and helping the individual develop self-discipline have long been hallmarks of the selfdirected approach. Furthermore, these values are inherent to the covenant tradition. However, the growth in the number of educators committed to the self-directed method does not necessarily ensure that the method is successfully employed. Indeed, there is a great need for leaders in self-directed environments to ensure that teachers are properly equipped and encouraged to facilitate the selfdirected model. Perhaps there would be greater success for self-directed learning if more leaders, teachers, and parents applied covenantal principles to ensure that the learning process was a successful one for their students. Hopefully, this article provided some key examples of how to do so.

References

- Duby, D. G. (2006). *How leaders support teachers to facilitate self-regulated learning in learning organizations: A multiple-case study*. Unpublished doctoral dissertation, Regent University.
- Dynan, L., Cate, T., & Rhee, K. (2008). The impact of learning structure on students' readiness for selfdirected learning. *Journal of Education for Business*, 96-100.
- Elazar, D. J. (1980b). The political theory of covenant: Biblical origins and modern developments. *Publius* 10(4).
- Elazar, D. J. (1995). *Covenant and polity in Biblical Israel: Biblical foundations and Jewish expressions*. New Brunswick, Transaction Publishers.



Fischer, K. (2003). Leadership in faith-based nonprofits as compared to a covenantal framework of action: An exploratory study to develop an alternative theoretical framework for assessing organizational processes and influences. Unpublished doctoral dissertation, Regent University.

Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. Chicago: Follett.

- Lapan, R., Kardash, C., & Turner, S. (2002). Empowering students to become self-regulated learners. Professional School Counseling, 5, 257-265.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, *82*, 33-40.

Full References Available Upon Request



A PEDAGOGICAL PRESENTATION OF THE GORDON GROWTH MODEL

Jerome Duncan Tuskegee University The Andrew F. Brimmer College of Business and Information Science Tuskegee, AL 36088 <u>jduncan@tuskegee.edu</u>

Seth C. Anderson Tuskegee University The Andrew F. Brimmer College of Business and Information Science Tuskegee, AL 36088 profsethanderson@yahoo.com

Abstract

This case presents an efficient method for teaching how the Gordon Growth Model can be employed as a framework for estimating the underlying value of a firm's stock. The model employs dividends, the cost of a firm's equity, and its growth rate, to arrive at an estimate of stock's worth. The Capital Asset Pricing Model (CAPM) is used to arrive at the cost of capital. Both economic analysis and ratio analysis are employed to explain the likely impact of external and internal factors, respectively, on share worth. The case ends with a discussion of why actual market share price may vary widely from a reasonable estimation of its worth.

Keywords: Stock valuation; Dividends; Equity; Growth rate; Cost of capital

Introduction

Standing before the investments class, Professor Stephen Ziff comments, "Well, guys, we're about to wind up the semester. Today it's time to bring together the highlights of what we've covered on the valuation of common stock. We'll first look at the impact of different macroeconomic variables on the firm. Then, we'll look at some basic financial ratios in our analysis of how a firm's operations and financing impact its value." He passes out copies of Figure 1.



"Take a few minutes to look over this, and then we'll review it in-depth. I'll call on you to explain particular components of the chart to the class."

A few minutes pass. "Who can tell me what the 'heart' of the stock valuation model is called?"

The Gordon Growth Model

Student A: "It's called the Gordon Growth Model, and it's in the center of the figure below."

Professor Ziff: "And what do the various letters mean?"

Student B: " V_0 is the stock price at time period 0."

Professor Ziff: "Stop right there. We must remember that this model is used to estimate what the price or value of a stock should be. OK, we all know what a stock's price is. For example, the market price of AT&T is \$35 per share. However, this model is used to estimate a stock's value at time period *0*, which is the present. Please continue with your explanation of the other letters."

Student B: " DIV_1 is the expected per-share dividend at time period 1 (next year's dividend), k_s represents the required rate of return on the stock, and g is a constant growth rate."

Professor Ziff: "And who can help me with dividends?"

Student C: "Dividends are paid to shareholders out of a company's earnings. The dividends usually amount to a percentage of earnings per share. That is shown in Figure 1, right above the Gordon Model."

Professor Ziff: "That's right, and how are earnings per share computed?"

Student D: "The company's net income is divided by the number of shares outstanding."

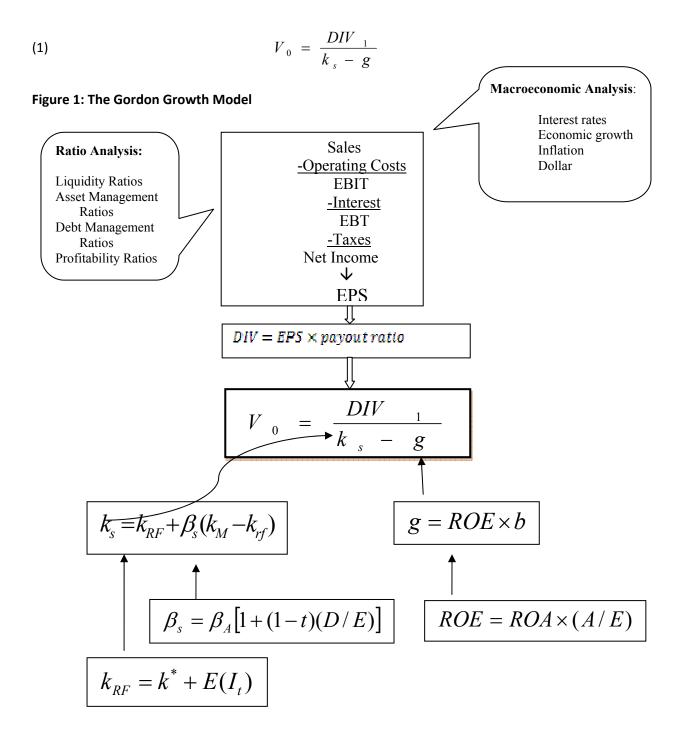
Professor Ziff: "Good job."

Student D: "So, even if we correctly estimate the Gordon Model, the actual price of stock may differ widely from our estimate?"



Professor Ziff: "That's correct. If its market price is above your estimate, then the stock should

probably be sold, and vice versa."





Conclusion

This case shows how the Gordon Growth Model can be employed as a framework for estimating the underlying value of a firm's stock. The model employs dividends, the cost of a firm's equity, and its growth rate to arrive at an estimate of stock price. The Capital Asset Pricing Model (CAPM) is used to arrive at the cost of capital. Both economic analysis and ratio analysis are employed to show the likely impact of external and internal factors, respectively, on share worth. The case ends with a discussion of why actual share price may vary widely from a reasonable estimation of its worth.

Questions

When answering the following questions asked by Professor Ziff, please assume the below metrics:

 $k_s = 10\%$ g = 5% $DIV_1 = 1 $k_{RF} = 3\%\beta_s = 1$

- 1. What is the estimated worth of ABC's stock?
- 2. Assume ABC's growth rate rises to 6%. What will be the effect on ABC's stock?



AN INVESTIGATION OF THE FLORIDA COMPREHENSIVE ASSESSMENT TEST (FCAT) AND THE BLACK MALE ACHIEVEMENT GAP

Rufus Ellis, Jr. Secondary Education Florida Agricultural and Mechanical University Tallahassee, FL 32307 <u>rufus.ellis@famu.edu</u>

Edward Tolliver Black Male College Explorers Program Florida Agricultural and Mechanical University Tallahassee, FL 32307 <u>edward.tolliver@famu.edu</u>

Ghazwan Lutfi Educational Leadership Florida Agricultural and Mechanical University Tallahassee, FL 32307 ghazwan.lutfi@famu.edu

Abstract

The Florida Comprehensive Assessment Test (FCAT) is perceived by many scholars as a highly controversial method for determining student academic performance and achievement. Every year thousands of students in Florida are required to prove academic growth through a battery of tests, which are designed to measure mastery of identified skills. Many critics have claimed that the test has essentially failed to produce an equalization of outcomes across the diverse racial and ethnic boundaries of Florida's K-12 population. Consistent research also shows that Black Males, in general, are more than likely to have the poorest performance on the FCAT. This study examines the most palpable discourse, which focuses on institutionalized practices that are closely associated with the efficacy of FCAT and its potential effects of standardized testing on Black Males. It also addresses both social and economic lifetime indicators for Black Males and examines possible preempted educational opportunities for this neglected population.

Keywords: Achievement gap, Assessment, Black males, FCAT



Introduction

The Black-White achievement gap in Florida's public school system displays all of the inequalities found at the national level. The official data from the Florida Department of Education (2007, 2008) demonstrate the existence of statewide Black-White gaps in high school completion/drop-out figures, but undoubtedly understate racial disparities by counting GED degrees in graduation rates. The NAEP's compositional proficiency percentage provides insight into the extent of learning differences between Black and White students in Florida, and these figures are disturbing. There is also convincing evidence of racial disproportionately in special education and school suspensions.

Since the mid-1980s several scholarly observers have characterized Black Male youth as an "endangered species" that is at inordinately high risk of failure across virtually all life domains (Jordan.& Cooper, 2003, p.200). Nationwide, African American male students display the poorest educational outcomes of all major demographic groups in the United States (Levin Belfield, Muennig, & Rouse, 2006, p.2), and Florida Black Males are no exception to these claims. Most research indicates that Black Males in Florida are academically unsuccessful by comparison to White Students in general and some evidence suggests that the Florida Comprehensive Assessment Test (FCA) may exacerbate the problem. Most importantly, findings of an investigation into the Black-White/gender gaps within Florida high schools have proven significant to the study of the Black male achievement gap and as grounds for educational policy decision-making.

Grading Florida Schools

The State of Florida has assessed the performance of its public high schools since the early 1970s, but during the past decade its assessment/accountability regime has been strengthened dramatically. There are three aspects to the current system that warrant attention. First, the state administers the Florida Comprehensive Assessment Test (FCAT), a "high-stakes" test that public school students must pass to be



eligible for graduation from high school (Borg, Plumee & Strahan, 2007, p.700). Based in part upon the FCAT and the NAEP standardized test scores, Florida rates its public schools and its school districts according to a five-tiered grading system that ranges from "A" to "F." Schools that receive an "F" are deemed to be failing and the grades for all schools are widely publicized. The controlling idea is that the "stigma" of receiving a failing evaluation (or even a low mark) will mobilize public pressure for change, which, in its turn will pressure school personnel to increase their efforts (Figlio & Rouse, 2004. p.29). Lastly, Florida is unique in that it embedded a school voucher program within its accountability system. Since 1999, the parents of students attending a failing school can apply for an "Opportunity Scholarship" that provides funding for tuition at a private school or they can elect to send their children to a high performing school. In addition to creating parental choice, a function of this program is to use competitive incentives to drive school improvement. In conjunction with the federal NCLB, Florida has a very "high pressure" accountability regime, one that features heavy reliance upon standardized test scores, including the FCAT and NAEP assessments (Kent, 2007, p.40).

A selective review of the available evidence strongly suggests that Black students enrolled in Florida public schools are much less likely to complete high school than their White peers, learn less while they are in school, and receive placement decisions (including exclusionary discipline) that diminish their chances for school success.

Florida's School Accountability Regime and the NCLB Act

Florida's student/school assessment and school accountability system has been the object of critical scrutiny, with policymakers expressing divided opinions about its efficacy and its capacity to reduce the state's Black-White public school achievement gap. A study conducted by Borg et al (2007) examined the effects of the FCAT on students graduation rates in Duval County, Florida and concluded that African American students and students from the lowest income households encountered a negative



graduation effect. Figlio and Rouse (2004) reported that schools receiveing an "F" or "D" grade found that modest gains in mathematics and smaller gains reading in the year following the accountability regime's introduction. Rouse, Hannaway, Goldhaber, and Figlio (2007) found that schools that had received low marks on Florida's A+ system changed their instructional practicesin meaningful ways.

Conclusion

Overwhelming evidence suggests that Black Males underperform both White students and Black females on standardized tests at elementary, middle, and high school levels. Furthermore, as indicated by Uwah, et.al (2008, p.296) Black Males are heavily over-represented among students assigned to special education, placed within the lowest ability groups, retained for one or more grades, and subjected to exclusionary discipline

There is no doubt that the Florida Comprehensive Assessment Test (FCAT) is impacting an unconscionably large proportion of Florida's Black male students. Should these practices continue, a prolonged crisis, which is distinguished by the severity of its manifest consequences will give way to a downward socioeconomic mobility within current and future generations.

References

- Borg, Mary O'Malley, Plumlee, J. Patrick, & Stranahan, Harriet A. (2007). Plenty of children left behind: High-stake testing and graduation rates in Duval County, Florida. *Educational Policy*: 21(5), 695-716.
- Figlio, David A. & Rouse, Cecilia. (2004). *Do accountability and voucher threats improve low-performing schools*? <u>http://ers.princeton.edu/workingpapers/14ers.pdf</u>
- Florida Department of Education. (2007). Dropout demographics in Florida's public schools and dropout rates. Florida Information Note: Series 2008-11F http://www.fldoe.org/



- Florida Department of Education. (2008). *Florida statewide graduation rates 1998-1999 through 2007-*2008. Retrieved on 20 January, 2009 from <u>http://www.fldoe.org/</u>
- Florida Department of Education. (2008b). *Collecting and reporting race and ethnicity data*. Technical Assistance Paper, Education Information and Accountability Services, FY 2008-02.
- Jordan, Will J. & Cooper, Robert. (2003). High school reform and Black male students: Limits and possibilities of policy and practice. *Urban Education*: *38*(2), 196-216.
- Levin, Henry M., Belfield, Clive, Muennig, Peter, & Rouse, Cecilia. (2006). *The public returns to public investments in African American males*.
- Kent, Richie. (2007). *Contexualizing the FCAT in Florida*: A spatial investigation of neo-liberal educational *reform*. MS thesis. University of Florida.
- Rouse, Cecilia, Hannaway, Jane, Goldhaber, Dan & Figlio David. (2007). *Feeling the Florida heat: How low-performing schools respond to voucher and accountability pressures*. Retrieved on 14 February, 2009 from <u>http://www.princeton.edu/ceps/workingpapers/156rouse.pdf</u>
- Uwah, Chinwe J., McMahon, H. George & Furlow, Carolyn F. (2008). School belonging, educational aspirations and academic self-efficacy among African American male high school students. Implications for school counselors. *Professional school counselor*: 11(5), 296-305.



CONTRAST OF THE SCIENCE TEACHING PRACTICES OF TWO PRE-SERVICE EARLY CHILDHOOD EDUCATORS

Deirdre S. Englehart College of Education University of Central Florida - Daytona Campus Daytona Beach, FL 32114 <u>dengleha@mail.ucf.edu</u>

Abstract

Most pre-service and beginning teachers need time and experiences to support their teaching practices as they move from the beginning stages of teaching during internship experiences into teaching in their own classroom. Many early childhood teachers do not have a strong background in science to support inquiry-teaching practices. Teachers are more likely to teach inquiry science when they have experienced it previously and when they have a good understanding of science content. This case study research investigated the teaching practices of two pre-service early childhood educators during their junior and senior internship experiences while teaching science. Both pre-service teachers had a similar program of study and both used educative curriculum materials during their senior internship teaching experiences to teach science. The Views of Science Inquiry instrument was used at the beginning and end of the research along with observations and interviews to explore their science teaching practices. Results of this research confirm that although teachers may have access to the same curriculum, their own background, experiences and beliefs influence their classroom practices especially regarding the implementation of scientific inquiry. Educative curriculum materials supported the teachers in teaching through inquiry practices but the extent to which they integrated inquiry was based upon their own beliefs and understandings of teaching.

Keywords: Pre-Service Teachers, Science Teaching, Educative Curriculum, Early Childhood Education Methodology/Data Collection



This research was guided by a case study approach with the integration of the Views of Science Inquiry Instrument (Lederman and Ko, 2003). Two pre-service early childhood teachers participated. Next, each teacher was observed teaching science in their internship site, initially teaching lessons of their choice guided by their internship teacher. The teachers were then observed using the CASES Educative Curriculum materials. Observations were conducted using the Field Supervisor Observation Instrument developed by Windschitl (2004). The Curriculum Access System for Elementary Science (CASES) curriculum was developed by the CASES research group at the University of Michigan (http://cases.soe.umich.edu/index.html). While teachers were using the CASES curriculum, they were interviewed to ascertain their use of the educative curriculum materials and how they were supportive in their teaching. At the conclusion of the research, the Views of Science Inquiry was once again administered.

Views of Scientific Inquiry Instrument

The VOSI-E (Views of Scientific Inquiry- Elementary School Version, Lederman & Ko, 2003) seeks to understand views about what work scientists do and what entails doing science. The goal is to seek an understanding of perceptions related to science inquiry. Specifically, this instrument assesses the development of the following ideas related to scientific inquiry. One, investigations have multiple methods and purposes. Two, there should be a consistency between evidence and conclusions. Three, data can be interpreted in multiple ways. Four, there is a difference between data and evidence. Five, data analysis involves the development of patterns and explanations.

Data Analysis

Data analysis for this research involved an evaluation of the Views of Science Inquiry – Elementary version (VOSI-E) instrument. Analysis also included examining, categorizing and tabulating the data from the Field Supervisor Observation instrument (Windschitl, 2004) along with the teacher reflections.



Specific techniques included pattern matching and explanation building. Categories were established that connected to scientific inquiry to ascertain how the pre-service teacher is integrating these into teaching practices. Specifically, the five essential features of inquiry were identified in lessons to indicate if teachers were able to implement inquiry with students (NRC, 2000).

Case Studies

Pippa and Alexis were both enrolled in the Early Childhood Education program in a regional campus of a large state university in the south. Both of these pre-service teachers were non-traditional students who earned their degree over an extended period of time. Pippa participated in her junior and senior internship experiences where she taught 3rd grade and Kindergarten respectively. Alexis also participated during her junior internship placement in a team teaching 1st grade classroom and in her senior teaching experience while teaching Kindergarten. Both pre-service teachers had naive views of scientific inquiry based upon the VOSI- E instrument.

Pippa Lessons: In the lessons Pippa implemented prior to the CASES curriculum, Pippa indicated that science content was an issue during her preparation and implementation of the lessons she taught and that some of the lessons would not really qualify as actual science lessons but reading lesson with a science text. The observations of Pippa's lessons did not show strong components of scientific inquiry. In the first two lessons, Pippa only engaged in scientifically oriented questions but did not delve further into inquiry. They were also at the lowest variation of questioning, "Learner engages in question provided by teacher, materials, or other source" (Windschitl, 2004).

CASES Lessons: Pippa taught five lessons from the CASES plant unit during her senior internship in a kindergarten classroom. Pippa followed the CASES lessons in a very specific manner. She enacted them very closely to the way they were developed. Pippa seemed very comfortable and even excited about the lessons and the student involvement during them. All of the lessons that Pippa taught included at



least 4 or 5 of the five essential features of inquiry. Overall, Pippa implemented the science lessons in ways that facilitated children's thinking and inquiry practices. She proved to be thoughtful regarding the management of lessons and prepared carefully and thoroughly.

Alexis lessons: Alexis taught her first science lessons from a scripted curriculum that was used by the school. The lessons included a flip chart with pictures and facts for students to review. In her lesson reflection, she indicated that in the first lesson, she was not prepared to teach and that she needed more information regarding the background of energy. Alexis was also overwhelmed trying to provide hands-on activities to 28 children in the lessons she taught. The science lessons were Alexis' first teaching experiences, as she did not have prior experiences in the classroom environment. In all of the pre CASES lessons that Alexis taught, scientific inquiry was not a strong component.

CASES Lessons Alexis taught 4 lessons from the CASES unit on plants in her senior internship classroom. Schneider and Krajcik (2002) found evidence from classroom enactment that indicated teachers did use the educative features in the lessons. Examples from Alexis's lessons also indicate that she was using the features provided in the CASES curriculum to support her teaching practice. She used a number of the strategies to support teachers in her implementation of the lessons. Scientifically oriented questions, data collection and communication of findings were the three essential features of scientific inquiry that were most apparent in Alexis' teaching. She also implemented explanations to some level in her CASES lessons. The extent to which the CASES curriculum materials were supportive in this research was dependent upon "how the opportunity is used by the individual" (Davis and Krajcik, 2005, p. 4). This research appears to indicate Alexis was limited in her full acceptance and implementation of the curriculum materials because of other classroom factors such as the science time during the circle time in the classroom, and the management of students during the science lessons.



Contrast of Practices The pre-service teachers used the CASES curriculum materials in a variety of ways. The ways materials were used contributed to their enactment of lessons and further to their development as teachers of science in this research. The extent to which the CASES curriculum materials were supportive in this research was also dependent upon "how the opportunity is used by the individual" (Davis and Krajcik, 2005, p. 4). During this research, both teachers included more components of science inquiry when using the CASES educative curriculum compared to when they taught on their own science lessons. Classroom management skills and pedagogical skills were a factor when comparing the two pre-service teachers and their ability to teach science. The findings indicate that Pippa was better able to manage the classroom in order to teach science. Science may be a more active subject area when children are engaged in their learning and therefore harder for new teachers to manage.

References

- Davis, E. A. & Krajcik, J. S., (2005). Designing educative curriculum materials to promote teacher learning. *Educational Researcher*, 34(3), 3-14.
- Lederman, J. S. & Ko, E. K., (2003). *Views of scientific inquiry-elementary school version*. Unpublished paper. Illinois Institute of Technology, Chicago, IL.
- National Research Council. (2000). *Inquiry and the national science education standards: A guide for teaching and learning*. Washington, DC: National Academy Press.
- Schneider, R. M. & Krajcik, J. (2002). Supporting science teacher learning: the role of educative curriculum materials, *Journal of Science Teacher Education*, 13(3), 221-245.
- Windschitl, M (2004). Folk theories of "inquiry:" How pre-service teachers reproduce the discourse and practice of an atheoretical scientific method. *Journal of Research in Science Teaching*,41(5), 481-512.



THE IMPACT OF HOMELESS ON THE EDUCATION OF CHILDREN FROM 3-1/2 TO AGE SIX

Charles Ervin College of Education Florida A&M University Tallahassee, FL 32307 <u>charles.ervin@famu.edu</u>

Renee Wallace College of Education Florida A&M University Tallahassee, FL 32307 <u>renee.wallace@famu.edu</u>

Abstract

This workshop focuses on improving the lives of homeless children by providing early education and care in community shelter facilities by creating educational, health, recreational spaces, and homeless family parental involvement at facilities housing homeless families. Concrete strategies for local implementation will focus on: the value of quality early education and health care for young homeless children; cross-systems training and networking; and collaboration locally and nationally. Information will also be presented on accessing early childhood education through McKinney-Vento and compensatory education programs such as Title 1.

Keywords: Education; Homelessness



A SMALL LOCAL GOVERNMENT: DID MISMANAGEMENT AND MISUSE OF RESOURCES EQUAL FRAUD, WASTE OR ABUSE?

Sally W. Gilfillan College of Business and Economics Longwood University Farmville, Virginia 23909 gilfillansw@longwood.edu

Frank W. Bacon College of Business and Economics Longwood University Farmville, Virginia 23909 <u>baconfw@longwood.edu</u>

Abstract

Circumstances came to light early in 2009 regarding the accounting, finance, and the oversight of resources in a small, rural government. As knowledge of the circumstances dispersed among the public, a split developed among concerned citizens. Some believe that fraud, waste, or abuse of taxpayer provided resources occurred. Other citizens view the circumstances as unfortunate and indicative of poor management practices but not fraud, waste, or abuse. This paper discusses the circumstances in contention and specific actions that were ignored by both the Chief Executive and the elected citizens who govern the County. These actions in hindsight are red flags indicating problems with management oversight and also with utilization of government resources.

Background

This case concerns a small, county government hereafter identified as County; the specific government is not specifically identified because of the possibility of indictment regarding fraud, waste or abuse of governmental resources. This County governs a largely rural area. Citizens living in the County enjoy relatively low local taxes: real estate is \$0.33/ \$100 and personal property is \$3.60/\$100. A major metropolitan area in the same state has a base real estate rate of \$1.09/\$100 (the base can be increased for several items); a city not in a metropolitan area has a \$0.95/100 rate. Citizens of the County's two



incorporated, small towns pay additional taxes: real estate taxes of \$.14/\$100 for one and \$.38/\$100 for the other. Personal property tax rates for these two towns are about a third of the County's rate. The County's cost of living index, December 2009, as identified by *city.data.com* was 80.7, the US average is 100. The US Bureau of Labor Statistics' reported the weekly wage as \$533 with an employment of 2,610 for 2009; this can be analyzed in several ways but certainly places the County in the bottom third of counties of its state in the employment and wage category.

These low tax rates and income levels constrain the level of resources available to manage the government. Yet the County's outside auditor recently indicated that the County is in excellent financial state with \$5 million in the bank and low debt per capita. New school and courthouse complexes have been constructed while maintaining a lower local tax rate than all but one local government in the state. The County's model of government consists of final authority for all government decisions resting with elected citizen Supervisors whose jobs are part-time. The constrained resources result in a small government staff with a chief executive, the County Administrator (CA) performing many functions. The positions of Treasurer, Commissioner of Revenue, Sheriff, Clerk of the Court and Commonwealth Attorney, are also elected positions and, under this model of government, are Constitutional positions with significant independence. The result is that the CA "administers" only his/her staff; the Constitutional Officers administer their own staff and offices. The Supervisors' only real authority over the constitutional offices is budgetary.

This structure of an elected Board of part-time citizens running the county in concert with elected quasiindependent constitutional officers and the resulting relationship between all parties underlies this case study. One might suppose that this quasi independence provided to constitutional executives was intended to ensure that the essential services provided are shielded from manipulations, threats, attempts to influence, and intimidation by the part-time Supervisors, the CA, or others. The



circumstances discussed in this article may either be viewed as indicating that the constitutional executives are indeed subject to threat or manipulation or they may be viewed as indicating that possibility can always become probability and thus needs to be guarded against. The circumstances also can be viewed as indicating that actions of the County Administrator were influenced more by the personalities and beliefs of the individual members of the Board of Supervisors than by good management practices.

The Discovery

The 2009 death and beneficiary claim for a County employee led to discovery of the "misuse of duties." In the process of completing paperwork, notifying the retirement system and insurance carrier major problems were discovered regarding the County's insurance. It had none! Investigation revealed that the insurance company had terminated the County for nonpayment. Checks were properly authorized, negotiated, and signed - but never mailed. Checks representing at least five years of payment were found in file folders and a file drawer.

Investigation revealed that the County Treasurer had complained to the CA, but not the Board of Supervisors, about the large number of outstanding checks to the insurance company. There are "stories" representing how and why the Treasurer's complaints were ignored or deflected but the facts are that no action was taken. Once the nonpayment of insurance became public knowledge, an examination was conducted and revealed additional problems with receivables and payables; these all represent harm to the County's finances. To date, only an examination has occurred; there has been no formal investigation report from any party.

Consequences to Date

In the same year that the above circumstances became public, two Supervisors of long tenure were defeated. The opposition centered on specific problems discussed above. The new Board very quickly



fired the CA who, ironically, in the previous year had received statewide recognition as an effective and long tenured chief executive. Also within a month, in public, the Treasurer was told by the Chair of the Board of Supervisors to "be quiet. I will get to you next." The Treasurer resigned and was replaced by the deputy Treasurer.

The County's independent auditor reported that the 2004 – 2009 outstanding checks to the insurance carrier were not discovered due to materiality. The audit report includes recommendations to prevent a reoccurrence of the circumstances of this case.

Discussion

What harm was suffered and by whom? To date no charges of fraud, or waste, or abuse of governmental resources have been brought. Some citizens believe that a more formal investigation and report is necessary. They find the circumstances discussed above unacceptable and indicative that other problems are yet to be discovered. Other citizens believe mismanagement occurred but the system eventually worked appropriately. These citizens believe the CA should not have been fired summarily. These citizens highlight the constrained size of the government staff caused, as discussed earlier, by low income levels and tax rates. They believe the County now has the significant challenge of managing a local government which has lost a chief executive (CA) who held many specific positions including budget director, clerk to the Board, planning director, purchasing agent and zoning administrator. The CA's long tenure resulted in a long institutional memory of many aspects of the government being contained within the knowledge of just one individual. This, to their viewpoint, represents significant damage to the County and a serious challenge that must be overcome.

The citizens who are unsatisfied that no formal investigation and report has been conducted believe that the circumstances that came to light must be pursued; they believe that the result would be legal charges against at least one individual. Thus, they wish to see further investigation regarding fraud,



waste, and abuse. They cannot accept that the County government "permitted" the circumstances discussed above to occur and to continue for such a long period. These two very different views of citizens, and their elected representatives, resulted in two opposing groups of citizens. This split has the potential to damage relations among individuals and the managing of their government actions for many years to come.

There may be a viewpoint on which the two sides can come to agreement while still maintaining their opinions about the circumstances of this case. That viewpoint is that what is mismanagement to one group, fraud to another, highlights the need for better and more specific accounting and finance procedures. Perhaps many years ago one a small government with constrained resources could not afford to put such procedures in place. In the year 2010 technology and software availability offer an avenue to afford, obtain and implement new processes and procedures that would highlight, raise a red flag, to problems such as those which occurred in the County for over five years.

Besides the necessity of improved accounting and finance systems, the citizen body ought to be able to agree that preventive measures and checkpoints must be put in place within the management, accounting and finance systems. Surely obstacles exist to investigating, designing, and implementing preventative measures. Years ago the rural nature of the County, the limited population and constrained financial resources would have been significant obstacles. Yet in this age of technology it would seem those ought no longer to be an obstacle. Associations of local governments provide a means to share ideas and processes. Opportunity exists for governments of all sizes and resource availability to develop governmental accounting and finance systems that include controls addressing better management processes, early warning systems, and effective preventative measures.

References Available Upon Request



FROM PRESIDENTIAL POLICY TO CLASSROOM REALITY: THE INDELIBLE IMPACT OF ESEA

Brenda F. Graham Department of Leadership Concordia University River Forest, Illinois Brenda.Graham@cuchicago.edu

Susan J Bridge Department of Leadership Concordia University River Forest, Illinois Susan.Bridge@cuchicago.edu

Abstract

The establishment of federal policy in the United States has always played a vital role in reforming education in America. Originally serving as the architect of public education in America, the federal government now serves as the engine behind public school reform. Notably, the federal government's leadership in providing financial support, guiding national dialogue, and asserting control over educational policy at the state and local level through funding, legislation and regulations has become a national trend during the past 45 years. This paper will discuss the impact of federal educational policy on teaching and learning in America's public schools by reviewing the creation and subsequent reauthorizations of the Elementary and Secondary Education Act (ESEA) over the past 45 years, under the direction of every president from Lyndon B. Johnson through George W. Bush. Then we will take a look at President Obama's present restructuring proposal, "A Blueprint for Reform," and will examine its projected impact on teaching, learning and student outcomes and on setting those criteria by which the quality and efficacy of both are measured.

Keywords: Education, Reform, Policy, Accountability, ESEA

Introduction



Responding to needs of racial discrimination and poverty-impacted children in 1965, the Elementary and Secondary Education Act (ESEA) was passed by Congress to recognize and amend the role of education in securing quality education across race and class. The federal government attempted to provide resources and tools to schools and districts where underserved students attended to ensure all students received a quality education. Title I was the major source of federal funding under ESEA and was enacted to ensure that children in low income school attendance areas have a fair, equal, and effective opportunity to obtain a high-quality education.

Background

The Elementary and Secondary Act was signed into law on April 11, 1965, as a foundational piece of President Lyndon Johnson's War on Poverty. The War on Poverty was the core piece of his "Great Society" agenda, with emphasis on poverty and civil rights (Elementary and Secondary Education Act, 1965). Johnson had orchestrated the passage of the landmark Civil Rights Act of 1964, which barred discrimination on the basis of race, color, or national origin by programs and services receiving federal assistance. President Johnson created, for the first time, a partnership among federal, state, and local governments to address part of the larger national agenda of confronting poverty and its damaging effects. ESEA went through various reauthorizations under each successive president during the subsequent years after the passing of the bill. A review of key events related to the various reauthorizations of ESEA is outlined in Table One.

U S. President in	Federal Policy/Action	Intent and Purpose
Office		
Lyndon Johnson	Elementary and Secondary Education	Met needs of educationally deprived
(1963 -1969)	Act of 1965	children in public and non-public schools.

Table 1. ESEA Policy Chronology: From Johnson through George W. Bush



	ESEA Reauthorization of 1968: Title	Aid for Bilingual education
Richard Nixon	National Assessment of Educational	Federally funded to carry out sampling of
(1969-1974)	Progress	student academic achievement.
	Title IX- 1972	Prohibition of sex discrimination in
		education
	Buckley Amendment - 1974	
		Family education rights and privacy
Gerald Ford	Education for the Handicapped Act	Guaranteed free and appropriate public
(1974-1977)	(PL 94-142) - 1975	education for children with disabilities.
		Mandated that all handicapped children
		have an IEP.
Jimmy Carter	Department of Education	Cabinet level department to supplement
(1977-1981)	Organization Act (PL 96-88) - 1979	and complement equal access to
		educational opportunities to all segments
		of the community.
Ronald Reagan	ESEA Reauthorization of ESEA-	Changed the name of Title I. Addressed
(1981-1989)	Educational Consolidation	concerns of waste, inefficiency, and
	Improvement Act (PL 97-35) – 1981	bureaucracy
	A Nation at Risk -1983	DEA report documenting ineffective



		teaching and declining student
	ESEA Reauthorization-Hawkins-	performance
	Stafford Elementary and Secondary	
	Improvement Act -1988	Allowance for school-wide Title I programs
George H. Bush	National Education Goals Panel -1989	Creation of National Goals
(1989-1993)		
	Reauthorized ESEA-Americans with	Clear prohibition of discrimination based
	Disabilities Act - 1990	on handicapping condition
Bill Clinton	Goals 2000 – 1994	Supported standards, assessment, &
(1993-2001)		accountability
	ESEA Reauthorization-Improving	Held states accountable for student
	Schools Act (PL 103-382)	achievement
George W. Bush	No Child Left Behind Act (PL 107-	Required annual testing, sanctions,
(2001-2009)	110)- 2001	teacher quality, and adequate yearly
		progress-all children to be proficient in
		reading and math

President Obama's Proposed ESEA Reauthorization

The Obama administration unveiled the framework for his administration's reauthorization of Elementary and Secondary Education Act (ESEA) of 1965 in March of 2010 (U.S. Department of Education). The plan, "A Blueprint for Reform," seeks to rewrite the current version of the "No Child



Left behind Act" that was signed into law in 2002 under President George W. Bush (U.S. Department of Education, 2002). The Blueprint has four focus areas:

• Improving teacher and principal effectiveness to ensure that every classroom has a great teacher and every school has a great leader;

• Providing information to families to help them evaluate and improve their children's schools and to educators to help them improve their students' learning;

• Implementing college-and career-ready standards and developing improved assessments aligned with those standards; and

Improving student learning and achievement in American's lowest-performing schools by providing intensive support and effective interventions. (U.S. Department of Education, 2010)
 Recommendations

The objectives stated in the Blueprint will need to be strengthened in order to assure positive educational outcomes under the proposed Reauthorization of ESEA. To support this endeavor, the following recommendations are proposed:

- Federal Federal funding for Title I must meet planned innovations.
- Strategies for low performing schools to meet the needs of all students must be requirements

for funding.

- Funded data systems to support and assess student learning.
- Well defined indicators of the competencies needed for success in college and careers must be in place in advanced of state and school planning.

Conclusion

As a people, we hunger to assure that all America's children receive an education which equips them with the tools to compete in a global economy and live as a fulfilled world citizen. Does "A Blueprint for



Reform" move us significantly in this direction? Will its expectations and requirements result in real accountability and improved future of all America's children? This we can only learn as we implement the details of this Blueprint and judge the resulting future.

References

Elementary and Secondary School Act. (April, 1965). Public Law 89-10.

United States Department of Education (2002). States impact on federal education project policy.

Washington D.C.: Office of Elementary and Secondary Education.

U.S. Department of Education (2010). A Blueprint for reform: The reauthorization of the elementary and secondary act. Washington D.C.: Office of Planning,

Evaluation, and Policy. Retrieved June 1, 2010, from www2.ed.gov/policy/elsec/leg/blueprint.



I SEE YOU, YOU SEE ME: OPENING THE DOOR FOR MUTUAL EFFICACY IN HIGHER EDUCATION

Tammy J. Graham School of Education The Citadel Charleston, SC 29409 tammy.graham@citadel.edu

Charles H. Graham Commandant's Department The Citadel Charleston, SC 29409 <u>charles.graham@citadel.edu</u>

Abstract

This interactive presentation focuses on lessons learned and unique perspectives attained from working as faculty and staff members at a military college. It is designed to assist college faculty members with investigating strategies for developing mutual respect with their students, exploring methods for promoting efficacy in higher education, discovering options for incorporating best practices in college classrooms, and examining opportunities to foster communication and collaboration across academic disciplines and support systems.

Keywords: Efficacy, Motivation, Relationships, Respect, Strategies

Introduction

"What's the difference between a high school senior and a college freshman?" I often ask my students this at the beginning of the school year. Interestingly, the response is always the same, "Not much, Ma'am." While I ask the upper class students this question in order to help them remember to have patience with the freshmen they are charged with training, it is important for college faculty to keep in mind the same thing. We seem to expect college freshmen to enter college with a great deal of maturity and information; however, there is no magic pill that makes them become more of an adult between their high school career and their entrance into higher education. Additionally, although



research indicates that similar to younger students, college students exhibit diverse learning styles (Honigsfeld & Dunn, 2009), we often find them enrolled in classes where lecture is the primary mode of instruction.

How can we help students successfully transition into higher education? How do we help them recognize that their efforts make a difference in their success? How do we help them increase their intrinsic motivation and strive to do well? How can we vary our instructional techniques to better reach each student? How do we build relationships across disciplines and academic support systems in order to better serve students and promote a positive workforce? How do we ensure that we get pleasure from our careers while we help students benefit from their higher education experiences?

Although we work at different ends of a unique college spectrum, my husband and I collaborate in an attempt to enhance the educational experiences of college students. We share many common views that guide us through this process, including the belief that we, by our actions, can make a positive impact in students' lives. Additionally, we cultivate relationships with other faculty members and support staff to develop a holistic approach for working with students in many nonacademic aspects of their lives.

Building Trust and Mutual Respect

To help students transition into higher education, it is important for us to build positive relationships with them. College freshmen often appear nervous and confused at the beginning of their college career. As a result, the climate of our classrooms should be relaxed and supportive so that all students feel comfortable enough to participate. Chickering (2006) stressed the importance of building a community of mutual respect within a classroom in order to boost learning. If students feel that they are accepted as part of a classroom community, they may be more apt to participate. Furthermore, in order for students to trust us as mentors, they have to know that we care. This can be accomplished by



demonstrating that we know our students' names and some personal information about them, such as hobbies and hometowns and by attending some of their activities outside the classroom or institution. In addition to being visible and accessible to students, we can show we care by letting them know that we have high expectations for them. We have found that our students tend to live up to our expectations, whether in the college classroom, military parade field, or athletic field.

Promoting Efficacy

Bandura (1997) suggests that those with a high sense of self efficacy are more likely to attempt and therefore accomplish difficult tasks. These committed individuals, who put forth extra effort when adversities arise, tend to persevere if they encounter an obstacle. "They concentrate on the task, not on themselves" (p. 4). If we can help students get motivated about learning, perhaps they will increase their sense of self efficacy. For example, once they achieve some increased level of success, they may be more intrinsically motivated to do well and more likely to take on additional responsibility for their own learning. Utilizing real world examples that they can readily relate to, can get them excited about learning. In other words, we can attempt to "know their music." Other motivational techniques include sharing our own personal experiences, both successes and failures, to demonstrate that we are human and vulnerable and soliciting pertinent student experiences to reinforce topics that we are teaching.

Instructional and Management Strategies

While it is important that an instructor has mastered his or her subject, it is just as important that the instructor has also mastered the art of teaching. Even the most knowledgeable subject matter expert must have the tools, disposition, and skills to convey the material in a manner that the students are able to understand and retain. Not all college students learn in the same manner (Honigsfeld & Dunn, 2009). By differentiating instruction, assessment, and classroom management techniques in college courses, professors may be able to connect with more students. For example, we have found that the simple act



of interspersing appropriate YouTube clips into our lessons entices many of our students about the subject matter.

Fostering Relationships across Disciplines

Positive partnerships within departments and across academic disciplines in higher education are important to assist students with meeting their academic potential and program completion. Additionally, we can improve our own teaching skills by learning from each other. We look for opportunities to blend areas of expertise in order to research and present with other faculty and staff members. Other ideas for fostering relationships include attending coworkers' presentations when the opportunities arise and being empathetic to the unique challenges in their discipline.

Conclusions

We believe that it is a privilege to work with young people in a college environment. There is joy in their youth. If we realize they are not far removed from high school students, perhaps we will be more sensitive to their challenges. If we believe we can make a positive difference in their lives, we can find opportunities to connect with them, enhance their educational experiences, make learning enjoyable, and help them take responsibility for their academic future. We see them, but more importantly they see us. We have the opportunity to help shape a generation by modeling self-efficacy.

References

- Bandura, A. (1997, March). Self-efficacy. *Harvard Mental Health Letter*, *13*(9), 4. Retrieved from Academic Search Premier database.
- Chickering, A. (2000). Creating Community Within Individual Courses. *New Directions for Higher Education*, (109), 23. Retrieved from Academic Search Premier database.
- Honigsfeld, A., & Dunn, R. (2006, Winter). Learning-Style Characteristics of Adult Learners. *Delta Kappa Gamma Bulletin*, 72(2), 14-31.



THE LEARNING ORGANIZATION: FROM DYSFUNCTION TO GRACE

Jeff Haldeman George Herbert Walker School of Business & Technology Webster University Saint Louis, MO 63119 <u>haldeman@webster.edu</u>

Abstract

This paper presents key findings from an action research case and consulting project completed in the Western U.S. with a large, amalgamated transit system located in a major metropolitan area. The author was retained by the agency to complete an organization assessment and to work with the Board of Directors and a new senior executive team to implement a plan for organizational change. In the assessment phase of the project, it became clear that learning disabilities and organizational dysfunction were preventing this agency from reaching its potential in organizational effectiveness. The previous leadership team was ineffectual and failed to address both strategic priorities and operational issues. The author worked with the organization, Board of Directors, and new executive team to generate a shared vision which all employees contributed too and were trained in. Assessment results pinpointed key issues and interventions that would need to occur to break-up the dysfunction, facilitate organizational learning, and close the loop to create redundant learning cycles and feedback loops. Organizational strengths and human assets were emphasized as building blocks for change. The author highlights a number of principles of effective change management, based upon the results of the action research project. Keys to success were executive and Board directionality, a comprehensive, integrated change plan and implementation, and a strong focus on role modeling, performance management, and accountability.

Keywords: Organizational learning, Dysfunction, Action research

The Learning Organization: A Case Example



In the last decade of the 20th Century, Peter Senge (1993), an M.I.T. management thinker, and two notable professors of organizational behavior, Chris Argyris and Donald Schön (1996), popularized a topic from management research which has been available in the management literature for 45 years (Argyris, 1967; Cangelosi & Dill, 1965). It is called organizational learning. Senge (1993) and his associates did some research with progressive and innovative companies and uncovered strategies and insights essential to the creation of flexible, adaptive organizations. His basic premise was that organizations needed to be capable of *learning* (p. 13) in order to adjust to the long-term economic hurricane conditions we face today. For Senge, learning was not just assimilating new information or even developing new competencies. Learning entailed a "fundamental shift or movement of mind" (p. 13). If individuals and organizations were learning, it meant that they were "expanding their capacity" (p. 14) to continuously create and recreate their own futures.

What I mean by a learning organization is a group of people, large or small, who are organized to produce specific products or services. They are bounded-off from other groups, and constantly engaged in an ongoing process of (1) focusing on their environment to collect data on customer expectations, (2) realigning structures, systems, and processes to respond to change and (3) continually confronting dysfunctions which threaten to impede organization effectiveness leadership, team work, and customer satisfaction. Put another way, the learning organization recognizes that the environment is constantly changing and changes itself to keep pace with these external shifts. Individuals and teams *must learn together* or *risk dysfunction* (italics added). I believe this is an ironclad rule.

I illustrate both the power and pain of organizational learning by presenting a case example of an organization I consulted to for 3 years. It started-out as a product of mergers and acquisitions. Several traditional transit agencies merged to form this new entity, Tranzex (not its real name). Located close to a dynamic and expanding urban center, the agency found itself quickly pressed to expand services to



accommodate a diverse and differentiated customer base. Born as a new entity, it still possessed the cultural artifacts and baggage of the smaller agencies from which it was formed. As a government agency, it was heavily regulated. This means many rules and procedures, the bureaucracy that inevitably accompanies regulation.

Learning Disabilities and Capabilities

Tranzex was a prototype and challenge for managing change. It faced: Lack of leadership, ineffective structures for teamwork, strained employee relations, management training disconnected from strategy, and communication walls between departments. Disrespect for authority was rampant, top-down. On the plus side, it was equally well –endowed: A Board convinced of the need for radical change, a creative and committed work force that cared deeply about serving customers, and a fairly secure funding base.

One Organization's Path Back to Sanity

Change came to this organization gradually. Years of non-responsive management finally combined with external stakeholder criticism, rapid growth of potential ridership, the cumulative impact of consultant studies, and Board weariness to bring Tranzex to the point of *impasse* [italics added]. As any good student of change knows, no dysfunctional system bound-up in vicious circles can change itself, by itself, *from within* [italics added] (Watzlawick, Weakland, and Fisch, 1974). In this case, the solutions were fairly straightforward, if not easy. We completed 10-15 macro and micro level interventions over a period of three years. However, it was the following change management principles which guided our thinking and ensured success in creating the learning organization:

Principles of Effective Change Management



- Tranzex expanded training and development (T&D) to cover the entire organization [italics added]. They
 included fundamental, behaviorally-focused coaching and team skills training for managers and 360°
 feedback/development for key executives.
- 2. They incorporated critical leadership behaviors in the performance plans of all managers [italics added] and held them accountable for results.
- 3. *Management, not consultants, led the change effort* [italics added]. The executive team accepted employee skepticism and distrust and countered it with openness, a results-focus, and a refusal to be intimidated by failures or mistakes.
- 4. *Tranzex focused on strengthening the basic integrity of leadership and management before looking to partner with the 3 unions* [italics added]. When a labor-management steering committee was finally formed, it was created on the basis of management results already achieved.
- 5. *The consultant contracted and interacted with all levels of the organization* [italics added]. It was not overly-reliant on leveraging the power of the top.
- **6.** The client organization committed itself to a structured, multi-year change effort which ensured that organizational learning would have time to diffuse throughout the system [italics added].
- **7.** Tranzex completed a restructuring of the management ranks to ensure that managers who had not been pulling their weight would be held accountable [italics added].

References

- Argyris, C. (1967). Today's problems with tomorrow's organizations. *Journal of Management Studies*, *4*(1), 31-55.
- Argyris, C. & Schön, D. A. (1996). *Organizational learning II: Theory, method, and practice*. Reading, MA: Addison-Wesley.



- Cangelosi, V. E., & Dill, W. R. (1965). Organizational learning: observations toward a theory. Administrative Science Quarterly, 10, 175-203.
- Senge, P. M. (1993). *The fifth discipline: The art and practice of the learning organization*. London, England: Century Business.
- Watzlawick, P., Weakland, J. H., Fisch, R. (1974). *Change: Principles of problem formation and problem resolution*. New York, NY: W. W. Norton.



WORK ENGAGEMENT

Seyyed Mehrdad Hashemi Saipa Groups Tehran, Iran hashemi@s_mehrdad.com

Abstract

In the survival of the organization human resources is one of the main elements of the organizations. So that the organizations try to create some attraction for the employees to gain two purposes: 1-increasing the efficiency of the organizations through increasing the employee's utility. 2- Keeping the key employees. To do so, one of the methods applied by organizations is engaging the employees which results in creating a willingness feeling in employees leading to performing all their time and energy on their duties in such a way that they don't realize the passing of time. To create such feelings within employees, different theories have been presented which Job Demand-Resource is one of them. Based on this model, the organizations make work engagement through decreasing job demands and increasing job resources which this will be effective in the performance of employees and organizations. *Keywords: Work engagement, Job-resource model, Personal resource, Burn out, Turn over intention*

Introduction

Engagement at work has emerged as a potentially important employee performance and organizational management topic. A growing body of evidence supports the relationship between engagement of the employee at work and organizational outcomes, including those which are performance based (Harter et al., 2002; Laschinger and Finegan, 2005; Laschinger and Leiter, 2006; Salanova et al., 2005; Schaufeli and Bakker, 2004).

Kahn (1990) provided a conceptual basis for job engagement, but did not develop an operational definition. Maslach and Leiter(1997) expanded Kahn's (1990) conceptual work. They argued that job engagement is situated at the opposite end of the continuum of job burnout or job disengagement.

114



They defined burn out as a psychological syndrome characterized by exhaustion, cynicism, and inefficacy, which is experienced in response to chronic job stressors. So, burnout is a metaphor that is commonly used to describe a state of mental weariness.

But the concept of work engagement has been characterized in two different ways. According to Maslach and Leiter (1997), engagement refers to energy, involvement, and professional efficacy, which are considered to be the direct opposites of burnout dimensions (i.e., exhaustion, cynicism, lack of professional efficacy). On the other hand, Schaufeli et al., (2002) defined engagement as "a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption".

Of the dimensions of work engagement, absorption refers specifically to total concentration on and immersion in work characterized by time passing quickly and finding it difficult to detach oneself from one's work (Schaufeli et al., 2002). The dimension of vigor refers to high levels of energy and mental resilience while working, an employee's willingness to make appreciable efforts in his or her job, and persistence in difficult situations (Schaufeli et al., 2002). A third dimension of work engagement—dedication—is characterized by a strong psychological involvement in one's work, combined with a sense of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli et al., 2002).

Factors that Affect Work Engagement

Job demand-resource model

Jones and Fletcher (1996, p. 34) define demands as 'the degree to which the environment contains stimuli that peremptorily require attention and response. Demands are the "things that have to be done." ' Clearly, in every job something has to be done. More specifically, job demands are those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs.



Job resources refer to those physical, psychological, social, or organizational aspects of the job that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development.

In the concept of the job resource- demand model, it is hypothesized that the presence of specific demands (i.e. work overload and personal conflicts) and the absence of specific resources (i.e. control coping, social support, autonomy, and decision involvement) predicts burnout which in its turn is expected to lead to various negative outcomes such as physical illness, turnover.

Many researchers indentified the factors that related to job demand and job resource. For instance some job demands that have been identified as major causes of psychological strain are work overload, a poor physical work environment, time demands at work (quantitative workload, i.e., having too much to do in a limited amount of time), work-to-family conflict (work interferes with family life), job insecurity(a threat of job loss), emotional demand. Also about the factors of job resources, some job resources have been identified either as major motivators that increase, or that—when lacking—act as factors that increase burnout such as: job control, access to information, supervisory support, innovative organization climate, social climate, professional development, autonomy, decision involvement, performance feedback.

Personal Resources in the JD-R Model

Personal resources are aspects of the self that are generally linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, & Jackson, 2003). Three typical personal resources, namely, self-efficacy (Bandura, 1989), organizational-based self-esteem (Pierce, Gardner, Cummings, & Dunham, 1989), and optimism (Scheier & Carver, 1994) are recognized by Hobfoll (2002) as fundamental components of individual adaptability.



According to this, Self-efficacy (i.e. individuals' perceptions of their ability to meet demands in a broad array of contexts; Chen, Gully, & Eden, 2001) contribute to motivation by influencing the challenges people pursue, the effort they spend, and their perseverance in the face of obstacles (Bandura, 1989). Further, Pierce and Gardner (2004) said that Organizational-Based Self-Esteem (OBSE) is the degree to which organizational members believe that they can satisfy their needs by participating in roles within the organization. Similarly, optimism is the tendency to believe that one will generally experience good outcomes in life. So it can be concluded that personal resource can effect on work engagement, too.

Although the JD-R model introduced as a starting point, and thus, primarily focuses on work characteristics as antecedents of burn out and work engagement, it is also expected that personal resources may be antecedents of work engagement too (Judge et al., 1997).

Theoretical Model of Work Engagement

By reviewing the previous parts we can say that, Figure 1 can demonstrate all the antecedents and consequences of work engagement schematically. Of course more job demands & resource can be defined according to this model.



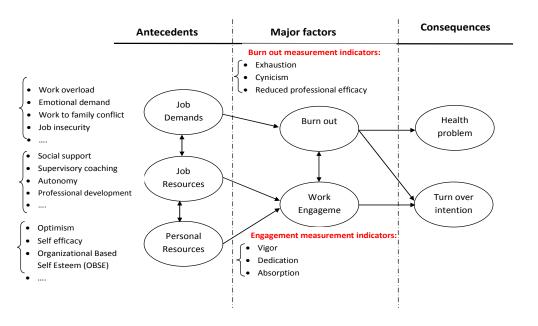


Figure 1: work engagement model

How to Measure Work Engagement and Its Antecedents and Consequences

To validate this model we should measure the degree of work engagement and its antecedents and consequences. According to this, some valid questionnaires have been defined like Utrecht Work Engagement Scale for measuring work engagement, Maslach-Burnout Inventory (MBI-GS) scales for measuring burn out and some similar questionnaire for measuring each factors of job demands and job resources.

Conclusion

The antecedents of work engagement can be examined using the JD–R model as the theoretical underpinnings. The JD–R model proposes that work characteristics can be divided into two general categories such as job demands and job resources. Job demands refer to "those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills. Job resources refer to "those physical, psychological, social, or organizational aspects of the job that are either/or: functional in achieving work goals, reduce job



demands and the associated physiological and psychological costs, and stimulate personal growth, learning, and development".

The existence of sufficient job resources also activates personal resources such as self-efficacy and optimism and thus results in work engagement. Work engagement, in turn, may produce positive organizational outcomes such as excellent performance, job satisfaction, organizational commitment, and lower turnover intentions.

References Available Upon Request



CONTINGENT CLAIM VALUATION – THE CASE OF CERTIFICATES PLUS RELOADED

Rodrigo Hernández College of Business and Economics Radford University Radford, VA 24142, USA <u>rjhernand@radford.edu</u>

Christopher Tobler College of Business Administration Stetson University DeLand, FL 32723, USA <u>ctobler@stetson.edu</u>

Pu Liu Sam M. Walton College of Business University of Arkansas Fayetteville, AR 72701, USA <u>pliu@walton.uark.edu</u>

Abstract

In this paper we introduce a new financial product named Certificates Plus Reloaded and we provide detailed descriptions of the product specifications. We show that the payoff of an Certificates Plus Reloaded can be duplicated by the combination of a zero coupon bond, a cash-or-nothing down & out call option on the index, down & out call options on the index and down & in call options on the index. We develop a pricing formula to price the certificate and apply it to a certificate issued by BNP Paribas SA to examine how well the model fits empirical data. The results are in line with previous studies pricing other structured products.

Keywords: Contingent claim valuations

Introduction

The creation, underwriting and trading of "structured products" (i.e., securities that provide cash flows combined from fixed income securities, equities, and derivatives) have become a significant source of revenue for banks. Over time, the complexity of these securities has increased, and some regulators



have expressed concern that they may be too complicated for individual investors to understand, questioning whether the risks are adequately disclosed (Lyon, 2005; NASD, 2005; Laise, 2006; Maxey, 2006; Simmons, 2006; Isakov, 2007).

In this paper, we study a new financial product known as "*Certificates Plus Reloaded*" (CPR). The return on these investments is contingent upon the price of an underlying equity index over a specified period. If the underlying asset price doesn't drop to a predetermined level (the *reload level*) over the period, the investors will receive a guaranteed redemption amount at maturity, plus a supplemental amount proportional to the return on the underlying asset. If the price drops to the reload level, the investors will receive a guaranteed minimum redemption amount, plus a supplemental amount equal to a prespecified multiple (the *performance factor*) times the difference between the closing price of the underlying asset at maturity and the reload level. Both payoffs are subject to a maximum, and cash dividends paid during the period are not included in the return. We develop a pricing model for these products using option pricing formulas and apply it to a CPR issued by BNP Paribas SA (BNP), a wellrecognized large European bank.

Description of the Product

The starting date for calculating the gain (or loss) of the underlying asset is known as the *fixing date* (*trade date*), and the ending date of the period is known as the *expiration date* (*closing date*). The price of the underlying asset on the fixing date is called the *reference price* and its price at expiration is called the *valuation price*. If we denote I_0 as the underlying asset price on the fixing date, I_R as the reload level, I_C as *cap level* (i.e., the maximum), I_T as the valuation price, and p the performance factor, then the total value an investor will receive on the expiration date (the *redemption value* or *settlement amount*), V_T , for an initial investment of €1,000, is equal to:



$$V_{T} = \frac{\notin 1,000}{I_{0}} \begin{cases} if I_{t} > I_{R} \text{ for all } t \in [0;T] \\ I_{0} & \text{and } I_{R} < I_{T} < I_{0} \\ I_{T} & \text{and } I_{0} < I_{T} < I_{C} \\ I_{C} & \text{and } I_{C} < I_{T} \\ if I_{t} \le I_{R} \text{ for some } t \in [0;T] \\ I_{R} & \text{and } I_{T} < I_{R} \\ I_{R} + p(I_{T} - I_{R}) & \text{and } I_{R} < I_{T} < \frac{I_{C} - I_{R}}{p} + I_{R} \\ I_{C} & \text{and } \frac{I_{C} - I_{R}}{p} + I_{R} < I_{T} \end{cases}$$

The Pricing of Certificates Plus Reloaded

The terminal value from Equation (1), V_T , for an initial investment of $\leq 1,000$ in one CPR with downside protection of 50%, participation rate of 200%, return capped at 100%, and term to maturity T, can be expressed mathematically as:

$$V_{T} = \in 1,000 \left[1 + \frac{1}{I_{0}} \max \left(0; I_{T} - I_{0} \right) - \frac{1}{I_{0}} \max \left(0; I_{T} - I_{C} \right) \right] \qquad ...(2)$$

when the underlying asset doesn't drop to the reload level between issue and maturity, and:

$$V_{T} = \in 1,000 \left[0.5 + \frac{2}{I_{0}} \max \left(0; I_{T} - I_{R} \right) - \frac{2}{I_{0}} \max \left(0; I_{T} - \frac{I_{C} + I_{R}}{2} \right) \right] ...(3)$$

when the underlying asset does drop to the reload level. Those familiar with option pricing models will notice these payoffs can be replicated using short and long positions on call options.

The payoff on one CPR is exactly the same as the payoff for six positions: 1) a long position on a zero coupon bond with face value of \notin 500 and maturity date T; 2) a long position in a down-and-out cash-ornothing call option with strike price I_R and term to expiration T for 500 options; 3) a long position in down-and-out call options with strike price I₀, barrier I_R, and term to expiration T for \notin 1,000 /I₀ options;



4) a short position in down-and-out call options with strike price I_{c} , barrier I_{R} , and term to expiration T for $\pounds 1,000/I_0$ options; 5) a long position in down-and-in call options with strike price I_R , barrier I_R , and term to expiration T for $2^* \pounds 1,000/I_0$ options; 6) a short position in down-and-in call options with strike price $(I_c+I_R)/2$, barrier I_R , and term to expiration T for $2^* \pounds 1,000/I_0$ options; 6) a short position in down-and-in call options with strike price $(I_c+I_R)/2$, barrier I_R , and term to expiration T for $2^* \pounds 1,000/I_0$ options, where T is the term of the certificate. Since the payoff of CPR is the same as the combined payoffs of these positions, we can calculate the fair value of the certificate. The resulting total cost for a CPR, where C_i represents the price aforementioned call option, is

$$TC = \notin 500 \left(e^{-rT} + C_1 \right) + \frac{\notin 1,000}{I_0} \left(C_2 - C_3 + 2C_4 - 2C_5 \right) \qquad \dots (4)$$

The profit to the issuer is the difference between the issue price and this total cost function.

Empirical Test

We empirically examine a CPR issued by BNP. Called the "*Certificate*^{PLUS} *RELOADED - DJ Euro Stoxx 50 – 2008*," it was issued on August 18, 2003 with the Dow Jones Euro STOXX 50 as the underlying asset. It had a 50% downside protection, a participation rate of 200%, and redemption was capped at 200% of par, which was $\leq 1,000$. The fixing date was August 8, 2003, with a five year term. To calculate the issuer's profit, we need the price of the underlying asset, I₀; the cash dividends and ex-dividend dates of the underlying assets to calculate the dividend yield; the risk-free rate, r; and the volatility of the underlying asset, σ . Price and dividend data are obtained from Bloomberg. The risk-free rate is the yield on five-year government bonds. The volatility is the implied volatility obtained from Bloomberg based on the call options of the underlying asset.

The five-year interest rate on the issue date based on the Euro swap rates was 3.53%. The dividend yield on the DJ Euro STOXX 50 Index was 5.24%, its value was 2,460.14, and the volatility based on the index call options was 25.68%. Using the methodology described earlier, the total cost of issuing each CPR is €844.28, for a profit of €155.72. That translates into an annual return of 2.94%, in line with



BNP's return on capital of 1.31% (after taking into account the marketing costs associated with the issue) as reported in its 2003 annual report. The return also can be translated into a return on equity of 31.28% using BNP's reported 9.4% Tier One Capital, also in line with by BNP's 28% pre-tax return on common stockholder's equity in the retail banking business (again, including marketing costs). The consistency between the results and BNP's reported financial data suggests the model is sound and robust. The result also provided additional evidence that the inventors of structured products are rewarded for their innovation. Previous studies have shown similar products to be overpriced by 2%-7% on average (see references).

Conclusion

In this paper we analyze a newly structured product known as Certificates Plus Reloaded. We further develop a pricing model for the certificates and we apply the pricing model to a certificate issued by BNP to examine how well the model fits empirical data. We find that issuance of the certificate is profitable for the issuer, consistent with previous studies pricing other structured products. The study provides insights into the design, payoff, pricing and profitability of the newly designed financial product, and the methodology can be extended to other structured products.

References

- Benet, B., A. Giannetti & S. Pissaris (2006). Gains from structured product markets: The case of reverseexchangeable securities (RES). *Journal of Banking and Finance*, 30, 111-132.
- Burth, S., T. Kraus & H. Wohlwend (2001). The pricing of structured products in the Swiss market. Journal of Derivatives, 9, 30-40.
- Chance, D., & J. Broughton (1988). Market index depository liabilities. *Journal of Financial Services Research*, 1, 335-352.

Chen, A., & J. Kensinger (1990). An analysis of market-index certificates of deposit. *Journal of Financial Services Research*, 4, 93-110.

Chen, K., & R. Sears (1990). Pricing the SPIN. *Financial Management*, 19, 36-47.

- Grünbichler, A., & H. Wohlwend (2005). The valuation of structured products: Empirical findings for the Swiss market. *Financial Markets and Portfolio Management*, 19, 361-380.
- Hernandez, R., J. Brusa & P. Liu (2008). An economic analysis of bonus certificates Second-generation of structured products. *Review of Futures Markets* 16, 419-451.
- Hernandez, R., W. Lee & P. Liu (2010). An economic analysis of the japanese reverse exchangeable market. *Advances in Financial Planning and Forecasting* (Forthcoming).
- Isakov, D. (2007, August 28). Le prix élevé de certains instruments tient aux frictions qui apparaissent sur le marché. *Le Temps*.
- Laise, E. (2006, June 21). An arcane investment hits main street. *Wall Street Journal Eastern Edition* 247(144), D1-D3.
- Lyon, P. (2005, October). Editor's Letter. *Structured Products*.
- Maxey, D. (2006, December 20). Market builds for structured products. *Wall Street Journal Eastern Edition*.
- National Association of Securities Dealer, 2005, Notice to Members 05-59 Guidance Concerning the Sale of Structured Products.
- Stoimenov, P., & S. Wilkens (2005). Are structured products 'fairly' priced? An analysis of the German market for equity-linked instruments. *Journal of Banking and Finance*, 29, 2971-2993.
- Simmons, J. (2006, January). Derivatives dynamo. *Bloomberg Markets*, 55-60.
- Wilkens, S., C. Erner & K. Roder (2003). The pricing of structured products in Germany. *Journal of Derivatives*, 11, 55-69.



THE ACHIEVEMENT GAP: TRENDS IN THE GAP OVER THE PAST 30 YEARS

Michelle Toston Hill Department of Educational Psychology University of Florida Gainesville Florida, 32601 <u>michel21@ufl.edu</u>

Abstract

The goal of this paper is to explain the trends associated with the widening and narrowing of the achievement gap over the past three decades. The achievement gap refers to the disparity in academic scores on reading and math standardized test for students of color when compared with White students. It is also used to represent the gap in performance between students of advantage and those from disadvantaged backgrounds (as identified by family affluence, income, or level of education). It is important to understand what causes the narrowing and widening of the achievement gap in order to facilitate policy makers in defining interventions that will improve achievement for students of color.

Keywords: Achievement gap, Minority, Advantaged, Disadvantaged

Introduction

Many reasons have been suggested for the changes in the gap in academic performance between children from majority backgrounds (Caucasian), and the performance of children from minority backgrounds (African American or Hispanic). I describe trends and explain some of the theories as to why the gap narrowed, stalled, and widened over the years. I use information gathered from the National Educational Statistics website, *the nation's report card*, reports on the No Child Left Behind legislation, and other research regarding the improvements and declines in racial disparities in achievement over the last 30 years.

Measuring and Assessing the Achievement Gap

National Assessment of Educational Progress (NAEP)



Comparing standardized test scores of Black and Hispanic students to the scores of White and Asian students is the most widely used indicator of the achievement gap. Much of the national data about the achievement gap comes from the federally funded National Assessment of Educational Progress, or NAEP (Kober, 2001). The NAEP assesses students in math, reading, writing, history, geography, civics, and theatrics (although math and reading are most commonly reported) in the 4th, 8th, and 12th grades.

No Child Left Behind (NCLB) Act

The NCLB act states that all children should be at or above a proficient level in math and reading by 2014. With the introduction of NCLB states were given four principles by which they were expected to raise achievement scores of all students, especially those in urban communities (Hunter & Bartee, 2003). The four principles are (a) stronger accountability for school results, (b) more flexibility for states and communities to use funding as they see fit to raise achievement, (c) a concentration of resources on methods of increasing achievement, and (d) more choices given to parents whose children may be underperforming (Hunter & Bartee, 2003). Data and research on the NCLB act help us to determine whether children are or are on the way to becoming proficient in mathematics and reading by 2014.

Trends in the Achievement Gap

1970-1980s

During the 1970s and early 1980s the achievement gap narrowed (Hunter & Bartee, 2003; Lee, 2002), especially for 17 year olds. Scores on the NAEP increased by six percent for 17-year-old Black students, and remained constant for White students, thereby narrowing the gap slightly during the period between 1973 and 1996 (Hunter & Bartee, 2003). Reading achievement, as measured by the NAEP, increased for African American and Hispanic students in the 70s and 80s, but stopped in the late 80s.



Researchers are very interested in why this reversal of trends has occurred with regard to the achievement gap (Hunter & Bartee, 2003).

1990-2001

The gap in achievement between Black and White students on tests had started to close until the 90s, and then the progress slowed (Johnston & Viadero, 2000). Although educators were spending time ensuring that students were acquiring the most fundamental skills, by the 1980s their efforts seem to have reached a peak (Johnston & Viadero, 2000). The results that could be reached with the current methods had reached a plateau. The executive director of the Education Trust in Washington, DC, Kati Haycock (as cited in Johnston & Viadero, 2000) stated that the plateau "should have been a signal for us to shift strategies" (p. 18). In 1999, by the end of high school, only 1 in 50 Hispanic 17-year-old students were proficient in reading to the point where they could read and understand specialized information from text, and only 4 in 10 could understand complex math operations. For African American 17-year-old students, only 1 in 100 could read and understand specialized text and fewer than 3 in 10 could understand complex math operations.

2002-2005 (NCLB era)

According to the National Center for Education Statistics, in 2005 the results for fourth-grade students according to the NAEP showed that Black students still trailed White students by 29 points in reading and 26 points in mathematics. Hispanic students trailed White students by 26 points in reading and 20 points in mathematics. In eighth grade, Black students scored an average 28 points less than their White classmates in reading and an average of 34 points lower in mathematics. Hispanic students scored an average of 25 points lower than their White classmates in reading and an average of 27 points lower in mathematics on the NAEP.

National Assessment of Educational Progress 2008, 2009



According to the nationsreportcard.gov, a website that reports the results and trends of the National Assessment of Educational Progress, in 2008 Black 9-year-old students still trailed White students in average reading score by 24 points and average mathematics score by 26 points, and Hispanic 9-year-old students trailed White students in average reading score by 21 points and average mathematics score by 16 points; Black 13-year-old students scored on average 21 points less than their White classmates in reading and 28 points lower in mathematics, and Hispanic 13-year-old students scored 26 points lower than their White classmates in reading and 28 points less than their White classmates in reading and 26 points lower than their White classmates in reading and 26 points lower in mathematics, and Hispanic 17-year-old students scored 26 points lower than their White classmates in reading and 21 points lower in mathematics. The scores for Black and Hispanic students have increased but the achievement gap still remains.

In 2009, the data from the trial urban district assessment was released. The scores on the reading and math sections of the exam are rising for all children. A report of scores on the reading achievement assessments (National Center for Education Statistics, 2010) shows that for Floridian children the Black-White achievement gap has fallen by 11 points since 1992. The statistics also show that the Hispanic-White achievement gap narrowed by 5 points since 1992.

Theories Proposed for These Changes in the Achievement Gap

According to the statistical analysis report offered by the National Center for Education Statistics (2009), the achievement gap could have narrowed in one of five ways; the average scores of both groups increase, while the score of the lower performing group increases even more; the average score of the higher performing group does not change, while the score of the lower performing group increases; the average score of the higher performing group declines, while the score of the lower performing group increases; the average score of the higher performing group declines, while the score of the lower performing group



performing group does not change; and/or the average scores of both groups decline, but the score of the higher performing group declines even more.

Conclusion

The achievement gap has narrowed, widened, and then narrowed again over the past 30 years. Researchers are and should continue to be determined to find ways of eliminating the gaps in achievement completely. Current methods of reducing the gap are showing some promising and should be further explored.

References

Haycock, K. (2001). Helping all students achieve: Closing the achievement gap. Retrieved July

30, 2006 from <u>http://www.cdl.org/resource-library/articles/achieve_gap.php</u>.

Hunter, R. C., & Bartee, R. (2003). The achievement gap: Issues of competition, class, and race. *Education and Urban Society*, *35*(2), 151-160.

Johnston, R. C., & Viadero, D. (2000). Unmet promise: Raising minority achievement. The achievement gap-part one of a four-part series. *Education Week*, *19*(27), 1, 18-19.

Kober, N. (2001). It takes more than testing: Closing the achievement gap. A report of the Center on Education Policy. Retrieved March 16, 2009 from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/22/a6.pdf

Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity?

Educational Researcher, 31(1), 3-12.

National center for education statistics (NCES) homepage. Retrieved May 27, 2009 from

http://nces.ed.gov/

National center for education statistics (NCES) homepage. Retrieved May 31, 2010 from

http://nces.ed.gov/nationsreportcard/pdf/dst2009/2010459.pdf



THE ACHIEVEMENT GAP: REASONS FOR AND WAYS OF REDUCING THE GAP

Michelle Toston Hill Department of Educational Psychology University of Florida Gainesville Florida, 32601 <u>michel21@ufl.edu</u>

Abstract

The gaps in academic achievement that exist between students of color and White students are very troubling. White students consistently outperform their minority counterparts on measures of academic achievement. Further, children from advantaged home environments score higher on academic achievement measure than students from disadvantaged home environments. Research shows that minority students make up a large proportion of students who reside in disadvantaged home environments. Defining the measures that can be taken to reduce the gap has been a focus for educators and policymakers for many years now. The goals of this paper are to review the literature regarding the achievement gap; to describe indicators of the achievement disparity and to describe the solutions proposed to reduce the achievement gap between minority students and White students as well as between advantaged and disadvantaged students.

Keywords: Minority, Students of color, Advantaged, Disadvantaged

Introduction

According to the most recent statistics released by the National Assessment of Educational Progress (nationsreportcard.gov), minority students are still trailing behind majority, or White, students in math and reading performance. The major ethnic groups in the United States are White, Black, Latino or Hispanic, and Asian (Kim, 2004). It is estimated that in the next few decades, most of the school children in the United States will belong to either the African American or Hispanic ethnic group, making it even more important that we increase our efforts now to ensure that all students are able to achieve at



proficient levels (Johnston, 2000; Johnston & Viadero, 2000; Kober 2001; Lee, 2002). Many reasons have been proposed to explain the gap in achievement, along with many proposed ways to narrow the gap. I define the academic achievement gap and describe some of the indicators of the achievement gap's existence. I also explore some of the reasons for the achievement gap and give a description of some strategies that have been proposed to reduce the gap in achievement in academic performance between majority and minority students.

The Achievement Gap

In relation to academic performance, two types of achievement gaps exist. There is a racial achievement gap and a socioeconomic (or SES) achievement gap (Lee, 2006). The racial achievement gaps refer to the disparities in achievement between members of minority (Black or Hispanic) and majority (Caucasian) groups, whereas the SES achievement gap refers to differences in achievement related to class status. Students from families with lower incomes or are in other ways economically disadvantaged are compared to their peers from families with higher incomes and advantaged backgrounds. Poor children do not make the same academic gains as more economically advantaged children (Lee, 2006). Of the two, the racial achievement gap is most often studied, but sometimes the two types of achievement gaps are confounded, in that, minority students are more likely to be economically disadvantaged (Becker & Luthar, 2002). And even in African American families belonging to affluent backgrounds, the achievement gap still persists, and is many times even larger (Gosa and Alexander, 2007).

Indicators of the Academic Achievement Gap

Numerous indicators are used to define the achievement gap. Researchers have studied and compared students' standardized test scores, academic grades, and college entrance exams scores to note differences in scores based on race or SES. Factors such as dropout rates and the number of students enrolled in difficult courses in high school have also been examined as possible indicators of the



achievement gap because they represent evidence of a decreased self-efficacy in students of color and disadvantage.

Reasons for the Gap

Identifying reasons for the gap in academic achievement is necessary for guiding efforts to reduce the gap between students of color and White students, as well as students of advantage and students of disadvantage. Discovering the factors that contribute to and sustain the achievement gap will enable researchers, educators, and policymakers to identify solutions for closing the gap and ensure that all children excel in school. Some factors that have been emphasized as reasons for the existence of an achievement gap are stereotype vulnerability, teacher low expectations and quality, student's peer group affiliations, disparities in access to resources in their communities, disparities in funding, and the fact that fewer numbers of minority children enrolled in advanced academic courses. The academic gains of students who have access to educational resources over the summer months (which are most likely students of advantage) are also examined as possible sources of an achievement gap during the school year.

Ways Proposed for Reducing the Gap

Listed below are a few strategies that have been suggested as ways to close the achievement gap. First, minority students and their families should be provided access to early childhood care. Minority children are more likely to come to school without having had access to preschool opportunities, or other prior experiences that may be beneficial to their academic readiness for school (Johnston & Viadero, 2000; Kober, 2001). Secondly, disadvantaged and minority students need access to resources for successful class completion throughout the school years, including having high quality teachers who set high expectations for their students' achievement. Lastly, students of disadvantage and of minority status should be encouraged to enroll in advanced level classes in school. They should also be provided the



assistance needed to help them remain in those courses. The difficulty of the courses a student takes in high school is actually more predictive of college success than the SAT (Haycock, 2001; Viadero, 2000).

Conclusion

The research and solutions I have presented is by no means exhaustive. There are many other strategies being identified to reduce the achievement gap. The purpose of this paper was to highlight some of the indicators of, reasons for, and strategies to reduce the academic achievement gap between minority and White students and the gap in achievement between disadvantaged and advantaged students.

If the achievement gap between students belonging to different ethnic groups is to be closed, then a thorough look at educational policies will need to be made. Efforts should be focused on ways to foster an environment where all students can achieve and live up to their potential (Singham, 2003). The goal is not to halt the progress of high performing students until minority students catch up, but instead interventions are needed to help African American and Hispanic students to perform as well as their White and Asian peers (Ladson-Billings, 2007). If all students make only the same academic gains throughout the school year, the achievement gap will remain constant.

References

- Becker, B. E., & Luthar, S. S. (2002). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist*, *37*(4), 197-214.
- Gosa, T. L., & Alexander, K. L. (2007). Family (dis)advantage and the educational prospects of the better off African American youth: How race still matters. *Teachers College Record, 109*(2), 285-321.
- Haycock, K. (2001). *Helping all students achieve: Closing the achievement gap*. Retrieved July 30, 2006 from <u>http://www.cdl.org/resource-library/articles/achieve_gap.php</u>
- Johnston, R. C. (2000). As the U.S. Hispanic population soars, raising performance becomes vital. Edweek.org [Electronic version]. Retrieved from



http://www.edweek.org/ew/articles/2000/03/15/27hispanic.h19.html

Johnston, R. C., & Viadero, D. (2000). Unmet promise: Raising minority achievement. The achievement gap-part one of a four-part series. Retrieved from

http://www.edweek.org/ew/articles/2000/03/15/27gapintro.h19.html

- Kim, J. (2004). Summer reading and the ethnic achievement gap. *Journal of Education for Students Placed At Risk, 9*(2), 169-187.
- Kober, N. (2001). It takes more than testing: Closing the achievement gap. A report of the Center on Education Policy. Retrieved March 16, 2009 from

http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/22/a6.pdf

- Ladson-Billings, G. (2007). Pushing past the achievement gap: An essay on the language of the deficit. *The Journal of Negro Education, 76*(3), 316-323.
- Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher*, *31*(1), 3-12.
- Lee, J. (2006). Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in- depth look into national and state reading and math outcome trends. Cambridge, MA: The Civil Rights Project at Harvard University.

Singham, M. (2003). The achievement gap: Myths and reality. *Phi Delta Kappan, 84*(8), 586-591.

The nation's report card. Retrieved May 27, 2009 from http://nationsreportcard.gov/ltt_2008/

Viadero, D. (2000). Even in well-off suburbs, minority achievement lags. In Unmet promise: Raising minority achievement. The achievement gap-part one of a four-part series. *Education Week*, *19*(27), 22-23.



MARKETING: A SKILL NEEDED BY TODAY'S ACCOUNTANTS

Donna J. Hill Foster College of Business Administration Bradley University Peoria, Illinois <u>donna@bumail.bradley.edu</u>

Shondra Johnson Foster College of Business Administration Bradley University Peoria, Illinois <u>sljohnson@bumail.bradley.edu</u>

Abstract

This paper describes a marketing seminar built around key concepts that are critical for practice development in a public accounting environment. The seminar emphasizes the strategies, tools and approaches for addressing the challenges of professional services marketing and uses as its major learning tool, the writing and presentation of a proposal to a selection committee.

Keywords: Marketing, Accounting, Proposals, Professional services, Branding

Introduction

While several professional services marketing courses exist, this seminar focuses on graduate-level accounting majors. Each element of marketing becomes important as participants complete written and oral assignments designed to build on each other. At the start of the seminar, participants are divided into groups and asked to form their own accounting firms. These firms are the platform participants use to learn and develop a marketing strategy. The seminar culminates in firms competing for a new client engagement by responding to a request for a proposal (RFP). As outlined below, the seminar consists of four stages.

Stage One – Marketing Strategy



The seminar opens with a discussion of similarities and differences among traditional, services, and professional services marketing. By necessity this involves coverage of strategic planning, segmentation, target marketing, positioning and branding. Many accounting graduate students have not been exposed to the various types of market coverage: mass marketing, focused (target) marketing, niche marketing, and micro marketing. The discussion leader should share examples of professional service firms with each of these market orientations. Building on these examples, a clear case can be made for the relationship of the brand to such concepts as positioning, value proposition and service standards. Stress should be placed on why, for professional services, the brand promise assumes more importance than it does for branded goods.

Understanding the economics of an accounting firm and its connection to marketing strategy is paramount for new accounting professionals. The net amount of earnings for partners (i.e. distributable income to the partners) represents the heart of this discussion. Revenues reduced by expenses yields net earnings. While many business organizations would call this result net income, an accounting firm recognizes that the result represents earnings available for partners. Such wording reflects the need for new hires to be accountable for their time at work and avoid the practice of "eating hours". Partners typically focus on five financial indicators to improve the efficiency of a firm's operations. These indicators include utilization percentages, accounts receivable balances, amounts of unbilled work, realization percentages and working capital.

Stage Two – Marketing Mix Tactics

The marketing mix tactics of servicescape, firm promotion and public relations, personal marketing and qualification packets are the core of stage two. The role of professional dress and office location/atmosphere and its impression on potential clients should be demonstrated. The Berry and



Bendapudi (2002) article makes a great reading assignment about how the Mayo Clinic manages its servicescape and generates considerable additional discussion.

Guidelines for developing service communications include promising what is possible, making the intangible tangible (address service intangibility), reducing client risk perceptions, managing service promises, and recognizing the relationship between staff and clients (Mittal 1999; Hill and Gandhi 1992; Berry and Clark 1986). Furthermore, these guidelines need to cross all elements of the marketing communication mix including professional selling, advertising, client testimonials, word of mouth, public and community relations, plus corporate design.

Public relations supports and extends the advertising/website message and can develop a favorable attitude toward the firm, thus making communications more credible. Public relations play a critical role in most professional practices, as it generates a broad-based knowledge of a firm and its skills while building credibility. Public relations for professional service firms generally take the form of memberships in community and professional organizations as well as sponsorships and social cause marketing. Maister (1993) could be assigned as a reading.

Most new clients come from referrals; therefore participants need to appreciate the importance of personal marketing. The importance of becoming active in the community and professional organizations is not always apparent to young professionals and should receive high priority. Each participant is required to write a personal marketing plan. In conjunction a guest speaker with at least five years of professional services experience gives relevance to the importance of internal marketing. One additional tool some accounting firms use is a marketing or qualification packet. The packet is a description that says who you are as a firm. It includes such items as key personnel bios, firm mission statement, brand promise, value proposition and specializations. Our seminar requires each team to



put together a marketing packet. We encourage participants to draw on the marketing concepts presented in class as well as their own personal marketing plans.

Stage Three – Responding To Proposals

Stages one and two focus on marketing concepts needed by public accounting professionals. The purpose of stage three is to apply such concepts, while emphasizing quality and a customer focus. During this stage participants exhibit technical and research skills learned in their accounting courses. Bankers, attorneys, insurance agents and existing clients provide the majority of referrals for new clients. Depending on the strength of the referral, new clients may not require a proposal. Regardless of the need for a proposal, the accounting professional must understand the individual decision maker(s), recognize criteria for firm selection and demonstrate an understanding of the potential client's business. Understanding the potential client's business involves a review of its financial statements, identification of its service needs, assessment of management's integrity, evaluation of potential liabilities to third parties, and knowledge of its relationship with past and present accounting firms.

We chose to write a RFP from the American Red Cross because information about the organization is readily available online and in press releases. This allows participants to apply research skills and develop credible solutions. Responding to an RFP involves estimating fees for services. Fees represent the primary source of revenue for an accounting firm and are critical when determining the net amount remaining for owners. We asked participants to consider fee-based pricing, compared to value-based pricing. They need awareness that clients seek cost efficiencies in all areas of their organizations, including accounting fees (Reason 2010).

Stage Four – Presentation and Follow Up

Stage Four of the course requires participants to present their written proposals to a selection committee, follow up on any open items and describe the process of customer satisfaction assessment.



This represents the completion of using the case to teach all the elements of marketing the professional services of an accounting firm. The selection committee has access to participant-prepared information: qualification package, client acceptance form, questions for key personnel and written proposal. After experiencing the presentations, selection committee members confer and choose the students' firm that may best suit their needs. The committee communicates its selection and provides feedback. Debriefing is held later.

In order to prepare participants for the presentation element of the seminar, the discussion leader needs to familiarize the participants with marketing quality and satisfaction concepts and models. The importance of managing expectations and understanding the RATER scale could be emphasized. In professional services, reliability is generally considered to be technical performance and is the most important factor in driving quality and satisfaction. However, technical competence is always expected and is a necessary but not a sufficient performance characteristic to result in satisfaction. The significance of these findings for accountants is that client satisfaction with a firm's services is based upon their perception of the quality of the service they receive measured against what was expected (Simon 2009).

Conclusion

This paper gives the tools needed to teach a professional services marketing seminar. The seminar makes explicit to participants that they will be involved in marketing, even though it is not specifically part of their job description. Participants also become sensitized to the need to develop their marketing, interpersonal and communication skills. By developing a marketing strategy for their own firm and pitching services, participants gain the ability to match their career interests with a firm's market position. Furthermore, participants learn that technical competency alone does not guarantee long-term success in the public accounting profession. (**References are available upon request**)



TEACHING PROBLEM SOLVING WITH NCTM IN MIND

Althea Hylton-Lindsay William Paterson University Wayne, NJ 07470 <u>hyltona@wpunj.edu</u>

Abstract

This article presents a problem-solving activity that incorporates the NCTM Standards and a comparison of various strategies.

Key Words: Mathematical Problem Solving Strategies; NCTM

Introduction

We will explore The Birth Order Problem. It shows that mathematics problems can be solved several

ways. The beauty of mathematics can emerge during explorations of strategies for solving problems.

Question 1: A couple has four children. How many birth orders (arrangements of boys and girls) are possible if the couple has two girls and two boys?

Patterns: Systematically write out the different combinations of boys and girls.

Question 2: If someone tells you they have four children and two of those children are girls, can you assume that they have two boys?

Question 3: Is it practical to see how many ways the couple can have two girls or two boys in four children - instead of considering all four children?

Question 4: If you can answer Question 1 when considering only two children (either the two girls or the two boys) as effectively as when working with all four children, how many children would you choose to work with?

Create a table of 4 column and 7 rows. Consider the first position that the first girl would occupy in each row and the very *next* position the second girl would occupy in that row, such that each new row is different from the previous rows. For example, if the first child is a girl, the next place to have the other



girl is second. Is a different arrangement possible with the first girl occupying the same position? If so, where is the very **next** place to have the second girl such that this arrangement is different from the previous one? At the end of each row record the birth positions of the two girls in that row. (6)

Discrete Mathematics: (Tree Diagram) Think of the first child as a stem of the tree. Each birth arrangement is considered a branch. Go back to the "stem" after each birth and complete each branch one birth at a time while checking to see that there are only two girls and two boys on each branch. Complete the uppermost branches before completing subsequent branches as this alleviates the problem of leaving incomplete branches and missing a possible birth order. Every step of the way, consider questions such as - When it is time to have the next child what are our options: girl, boy, or both? This method is compared to the first method with patterns, as they both produce the actual birth arrangements and not just the number of birth orders. Count the number of complete branches to discover that there are six possible birth orders of two girls and two boys.

You may also complete a tree diagram of all possibilities for having four children and then consider only those branches with two girls and two boys. This tree diagram provides a better comparison between this method and a later method that uses Pascal's Triangle; like Pascal's triangle this tree diagram indicates the *number* of possible birth orders. Additionally, it provides the birth order arrangements themselves.

Probability: (Combinations) Use a combination of n things taken r at a time. Combinations are useful in solving probability problems. A combination is explained as an arrangement of objects without regard to order. In this case we are dealing with a combination of four children taken two at a time - if we choose to look at the two boys or the two girls. The following formula is used:

ⁿC_r = (n!)/[(n - r)!r!], if n and r are natural numbers and n is greater than or equal to r. Consider the concept of **factorial**. This method will produce an answer of six - resulting from:



 ${}^{4}C_{2}=(4!)/(2!2!)=(4 \times 3 \times 2 \times 1)/(2 \times 1)(2 \times 1)=24/4=6.$

Question 5 - If the couple has four children

a. How many possible arrangements have no girls and four boys? (1)

b. How many possible arrangements have no boys and four girls? (1)

c. How many possible arrangements have one girl and three boys? (4)

d. How many possible arrangements have one boy and three girls? (4)

e. What is the probability that the couple will have two girls and two boys? (6/16 or 3/8)

f. What is the probability that the couple will have no girls and four boys? (1/16)

g. What is the probability that the couple will have no boys and four girls? (1/16)

h. What is the probability that the couple will have one girl and three boys? (4/16 or 1/4)

i. What is the probability that the couple will have one boy and three girls? (4/16 or 1/4)

j. What is the probability that the couple will have three or more girls? (4/16 + 1/16 = 5/16)

k. What is the probability that the couple will have a girl first? (8/16 or 1/2)

Pascal's Triangle: To build Pascal's Triangle, start with a triad of ones. At each successive level, a one is placed at each end of the row. The sum of each pair of adjacent numbers is placed on the next level below the midpoint between those numbers.

Compare the answers to question 5a-5d, **(1 4 6 4 1)**, to the 5th level of Pascal's triangle. Along with the answer, the number pattern indicates that there are 6 ways to have 2 girls and 2 boys in 4 children.

Use a similar problem to see if Pascal's triangle yields the number of possible arrangements.

Use each of the above methods to solve the following problems. A couple has five children ...

a. How many birth orders (arrangements of boys and girls) are possible if the couple has three girls and two boys? (10)

b. What is the probability that the couple will have two or more girls? (26/32 or 13/16)?



c. Which method do you prefer? Why?

Advantages and disadvantages of the different methods must be discussed. Although the combinations method is faster, it is limited in the amount of information it provides. The Combinations method produces the number of arrangements but is not necessarily the most efficient method to answer probability questions. Pascal's triangle provides the total number of arrangements for having five children, thirty-two, while also providing a means to answer specific questions regarding birth orders. A complete tree diagram, like Pascal's triangle, gives the probability of an event and also provides the total number of possible arrangements for having a certain number of children. The tree diagram and the first method, Patterns, produce the actual arrangements, which may be necessary in real-life situations.

Consider the next four problems, which also require a similar mathematical approach.

<u>A chemist</u> selected ten colors for use in a chromatography experiment. Each trial involves the mixture of three colors at a time. How many trials can be performed using different groups of three colors? (Each color may be used in different mixtures.) (120) *Background Information: <u>Chromatography</u> is a technique used by scientists to separate mixtures of pigments or other substances.

<u>The photographer</u> at a wedding wants to take a collection of pictures with the Maid of Honor, Best Man, Ring Bearer, Flower Girl, Bride's Maid and Usher. If she can only photograph them four at a time, how many different pictures does she need to take with the wedding party if each <u>set</u> of four people is counted only once? (15)

<u>A dance teacher</u> wants to create a short routine with three dance steps, the "left side <u>step</u>", the "right 360-degree <u>turn</u>" and the "<u>leap</u>". If he needs to decide which sequence of steps will be most dramatic, how many routines will he need to rehearse? (6)

Draw Pascal's Triangle to the 7th level and look for a pattern. See the pattern involving powers of 11:

 $1 = 11^{0}$



11	=	11 ¹
121	=	11 ²
1331	=	11 ³
14641	=	11 ⁴

The pattern changes when 2-digit numbers appear. The number ten appears on the 6th level. The triangle has a vertical line of symmetry.

Palindromes: Reading the numbers from the 2nd to the 5th level (11, 121, 1331, and 14641) forward and backward, show that the numbers read the same in both directions. Palindromes are numbers that are the same when read forward and backward. Do the numbers (11, 121, 1331, and 14641) affect any property of Pascal's Triangle? Because these numbers are palindromes, and palindromes are symmetric, then the triangle is also symmetric. Think about palindromes in everyday life. Consider the address of William Paterson University - the zip code is 07470, a palindrome. Think of numbers, such as years, that may be palindromes - 1991 and 2002 for example.

Conclusion

Explorations of problem-solving strategies help students become more relaxed with numbers and patterns. Students enjoy different strategies, ranging from the mathematically sophisticated, to a simple strategy appropriate for young children. Comparing strategies and deciding which ones they prefer is empowering for students, and encourage them to see themselves as problem-solvers. This type of exploration enables teachers to learn from their students, and fosters an active learning environment. When students discuss and analyze possible strategies their understanding of the problem is enhanced and they begin to see how the different approaches are connected. The chromatography, photography, and similar problems are important because they allow students to see that the problem-solving strategies they are learning have real applications in every-day life.



UNDERSTANDING THE NONSEGMENTAL CONTEXT SEGMENTAL UNDERSTANDING

Asghar Iran-Nejad College of Education University of Alabama Tuscaloosa, AL 35487 <u>airannej@bamaed.ua.edu</u>

Madeleine Gregg College of Education University of Alabama Tuscaloosa, AL 35487 mgregg@bamaed.ua.edu

Abstract

This article distinguishes two qualitatively different types of understanding. Segmental understanding, which is the only kind considered traditionally, relies on discrete knowledge structures. Nonsegmental understanding is radically different, has been discovered only recently, depends on systemic integration of biofunctional activity, and involves incidental impression formation, tacit learning, and reorganization of intuition. This form of understanding cannot be directly broken down into linearly associated knowledge structures. Rather, it acts as the source of knowledge production in the form of insights. Researchers who have so far investigated nonsegmentals have thought of them to have segmental sources, sacrificing the real benefit of investigating and formalizing them. This article concludes that nonsegmental understanding is the prerequisite source for genuine segmental understanding. Without this source, segmental understanding amounts to entertaining isolated mental fragments.

Key words: Segmental concepts, nonsegmental understanding, insight production, understanding as biofunctional integration

Overview

Human understanding is complex, nonlinear, and difficult to describe in coherent ways (Loftus, Oberg, & Dillon, 2004; Lyons & Page, 1981; Spiro, Feltovich, Jacobson, & Coulson, 1992). In addition to complexity,



states of understanding are capable of functioning in the antithetical modes of inordinate stability and unrestrained flexibility. Consequently, on the one hand, they seem to develop slowly, rely on overlearned habits of mind, and are statically controlling. On the other hand, genuine states of understanding are original to when they are being used, rapid pace, and dynamically controllable (Iran-Nejad, 1980, 1987). These conflicting features explain why, in the age of ubiquitous information, we are overwhelmed with knowledge about knowledge but know little about understanding (Gardner & Boix-Mansilla, 1994).

The phenomena and processes that inhere in understanding are governed by multiple-source dependencies in systemic organization (Iran-Nejad, McKeachie, & Berliner, 1990). They cannot partake in single-source interaction over straight connection lines. As a result, the focus on any facet of a complex state of understanding tends to simplify it irreversibly to the point of no longer actually matching the reality of its entire state of understanding (Iran-Nejad, Clore, & Vondruska, 1984). Unlike knowledge, understanding is productive of changing viewpoints that at any given moment determine flexibly and simultaneously whether something is a subject or an object, a cause or an effect , a past or a future event, constantly flipping the focus of thinking dynamically with the biofunctional flow of the production of ideas (Iran-Nejad, Marsh, & Clements, 1992; Pollan, 2006; Waltner-Toews, Kay, Neudoerffer, & Gitau, 2008).

As such, complex states of understanding in the biological person are likely to work more similarly to natural systems such as the rain cycle than human-made factories or computers. For interdependent interaction among segmental mental objects to work, the nervous system must first integrate the multiple sources of the nonsegmental human understanding just as for the rain cycle to work, the earth's ecosystem must integrate the multiple sources of the earth's nonsegmental atmosphere. According to the biofunctional model, the fundamental differences between segmental and



nonsegmental forms of understanding may be summarized as follows (Iran-Nejad, 2000; Iran-Nejad & Gregg, 2001; Prawat, 2000):

- Segmentals are a manifestation of the psychological side of understanding and a direct outcome of nonsegmental understanding; nonsegmentals are a manifestation of the biological, or biofunctional, side of human understanding and an integrated function of the nervous and bodily systems.
- 2. Segmentals are domain-specific; nonsegmentals are inclusive of all domains. For example, the intonation that distinguishes between a question and a statement is characteristic of all questions and statements; the meaning of a sentence is specific to a particular utterance. Intriguingly, children learn the nonsegmental intonation first and the and the production of the segmental domain-specific ideas later. Similarly, nonsegmentals like intonation are productive of all domain-specific ideas; whereas the opposite is not necessarily the case.
- 3. Although the biological person is aware of both segmentals and nonsegmentals, the awareness of segmentals is more mental than bodily (i.e., knowing); the awareness of nonsegmentals is more bodily than mental (e.g., intuition, intonation).
- 4. Segmentals are easy objects of selective attention; nonsegmentals are selective attention proof.

5. Segmentals represent knowledge content; nonsegmental represent intellectual wisdom.

The focus on segmental interaction at the expense of nonsegmental integration may explain the traditional emphasis on the specialization that comes with content knowledge at the expense of nonsegmental sources of human wisdom (Mayer, 1995; Prawat, 2000; Wiggins & McTighe, 2005). Similarly, the emphasis on content has come at the expense of passion (Neumann, 1999, 2006a). The momentum has been for expressing nonsegmentally-starved logical meaning in a correctly structured monotone. The same may be the reason for the separation of learning from application (Bransford &



Schwartz, 1999). Imagine teaching children to ask questions using utterances without the characteristic question intonation. Obviously, their questions would immediately lose their application value. The emphasis on segmental interaction at the expense of nonsegmental integration may also be the cause of the symbol grounding problem (Harnad, 1990, 1993, 2001) or the problem of the separation of the mind from the physical body (Bruer, 1997).

It is noteworthy that nonsegmental integration at the expense of segmental interaction would have similar adverse consequences. In the multiple-source human ecosystem, segmental interaction and nonsegmental integration go hand in hand. As Sperry illustrated people's capacity for interdependent interaction is analogous to the emergent process of a wheel rolling down the hill. He argued that the interdependent interaction between the shape of the wheel and the incline in the hill explains why the wheel rolls down the hill. He reasoned that this metaphor helps us explain the interdependent interaction between the body and helps us toward a better understanding of the ancient mind-body problem. Unfortunately, in his discussion of his analogy, Sperry did not consider the role of nonsegmental gravity.

The focus on interdependent interaction, of course, can go a long way because nonsegmental integration is such an available resource in authentic real-world contexts. The problem in educational and experimental settings arises, as Bartlett (1932) keenly observed, where simplification by isolation is practiced at the expense of the nature's simplification by integration. As far as the psychological, educational, and other basic as well as applied sciences are concerned, this should probably be considered the moral of this essay.

The central theme of this paper was to demonstrate that interdependent interaction among mental objects is not enough for understanding the complexities of human understanding. We must qualify this statement by noting that the culprit is not the theory of interdependent interaction. Rather it is the

149



propensity of any theory to foster simplification by isolation. Sperry's analogy of the wheel rolling down the hill is a case in point. When as competent an experimentalist as Sperry falls into the trap of simplification by isolation, there is a lesson in it for all of us. Thus, Sperry's interdependent-interaction analogy must find explanations for related facts about nature that are inconsistent with his interdependent interaction theory of the wheel rolling down the hill. For example, is the segmental shape of the wheel the relevant factor? What other part-to-part, part-to-whole, or whole-to-whole interactivity features can, alone or in combination, save the interdependent-interaction analogy of the wheel in explaining why shapeless avalanches, as unconnected piles of water molecules, for example, also roll down the hill? Why does water pour downward as rain and climbs upward as cloud? Clearly, more than interdependent-interaction theory is involved in these ubiquitous facts of nature.

In addition to the relatively more specialized prosodic and other language-related supersegmentals, human understanding seems to rely more generally on between-the-lines themes, moods, intuitions, attitudes, and other relatively subjective mental phenomena traditionally set aside as epiphenomenal, biased, animalistic, irrational, self-centered, and undesirable (Barrett et al., 2007; Neumann, 2006b; Panksepp, 1998). The extent to which these contributing sources of understanding continue to be overlooked or rejected by theories that are prone to simplification by isolation is likely to determine the gap between research and practice, learning and application, and other related problems as grounding symbols (Harnad, 1990), inert knowledge (Bereiter & Scardamalia, 1985; Renkl, Mandl, & Gruber, 1996), and pathologies of interdependent-interaction learning, in general (Shulman, 1999). Yet, it is with systemic, nonsegmental integration that human understanding, learning, and communication come to life.

References

- Barrett, L. F., Lindquist, K. A., Bliss-Moreau, E., Duncan, S., Gendron, M., Mize, J., et al. (2007). Of Mice and Men: Natural Kinds of Emotions in the Mammalian Brain? A Response to Panksepp and Izard. *Perspectives on Psychological Science*, 2(3), 297-312.
- Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge, UK: Cambridge University Press.
- Bereiter, C., & Scardamalia, M. (1985). Cognitive coping strategies and the problem of "inert knowledge". In S. F. Chipman, J. W. Segal & R. Glaser (Eds.), *Thinking and learning skills: Current research and open questions* (Vol. 2, pp. 65-80). Hillsdale, NJ: Erlbaum.
- Bransford, J. D., & Schwartz, D. L. (1999). Rethinking transfer: A simple proposal with multiple implications. In A. Iran-Nejad & P. D. Pearson (Eds.), *Review of research in education* (Vol. 24, pp. 1-19). Washington, DC: American Educational Research Association.

Bruer, J. T. (1997). Education and the brain: A bridge too far. *Educational Researcher, 26*(8), 4-16.

- Gardner, H., & Boix-Mansilla, V. (1994). Teaching for understanding in the disciplines—and beyond. *Teachers College Record, 96*, 198-218.
- Harnad, S. (1990). The symbol-grounding problem. *Physica*, 42, 335-346.
- Harnad, S. (1993). Grounding symbols in the analog world with neural nets—A hybrid model. *Think, 2*, 12-78.
- Harnad, S. (2001). Minds, machines, and Turing: The indistinguishability of indistinguishables. *Journal of Logic, Language, and Information, 9*, 425-445.
- Iran-Nejad, A. (1980). The Schema: A Structural or a Functional Pattern. Tech. Rep. No. 159 (ERIC Document Reproduction Service No. ED182735). Washington, D. C.: National Institute of Education.



- Iran-Nejad, A. (1987). The schema: A long-term memory structure or a transient functional pattern. In R. J. Tierney & J. N. Anders (Eds.), *Understanding reader's understanding* (pp. 109-128). Hillsdale, NJ: Erlbaum.
- Iran-Nejad, A. (2000). Knowledge, self-regulation, and the brain-mind cycle of reflection. *The Journal of Mind and Behavior, 21*, 67-88.
- Iran-Nejad, A., Clore, G. L., & Vondruska, R. J. (1984). Affect: A functional perspective. *The Journal of Mind and Behavior*, *5*, 279-310.
- Iran-Nejad, A., & Gregg, M. (2001). The brain-mind cycle of reflection. *Teachers College Record, 103*, 868-895.
- Iran-Nejad, A., Marsh, G. E., & Clements, A. C. (1992). The figure and the ground of constructive brain functioning: Beyond explicit memory processes. *Educational Psychologist, 27*, 473-492.
- Iran-Nejad, A., McKeachie, W. J., & Berliner, D. C. (1990). The multisource nature of learning: An introduction. *Review of Educational Research, 60*, 509-515.
- Loftus, G. R., Oberg, M. A., & Dillon, A. M. (2004). Linear theory, dimensional theory, and the faceinversion effect. *Psychological Review*, *111*(4), 835-863.
- Lyons, J., & Page, R. B. L. (1981). Language and speech [and discussion]. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences, 295*(1077), 215-222.
- Mayer, R. E. (1995). The search for insight: Grappling with Gestalt psychology's unanswered questions. In R. J. Sternberg & J. E. Davidson (Eds.), *The nature of insight* (pp. 3–32). Cambridge, MA: MIT Press.
- Neumann, A. (1999). *Professing passion: Views of passionate thought in scholarship*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal.



- Neumann, A. (2006a). Professing passion: Emotion in the scholarship of professors at research universities. *American Educational Research Journal*, 43(3), 381-424.
- Neumann, A. (2006b). Professing passion: Emotion in the scholarship of professors at research universities. *American Educational Research Journal*, 43, 381-424.
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.

Pollan, M. (2006). *The omnivore's dilemma: A natural history of four meals*. New York: Penguin.

- Prawat, R. S. (2000). Keep the solution, broaden the problem: Commentary on "Knowledge, selfregulation, and the brain-mind cycle of reflection". *The Journal of Mind and Behavior, 21*, 89-96.
- Renkl, A., Mandl, H., & Gruber, H. (1996). Inert knowledge: Analyses and remedies. *Educational Psychologist*, *3*, 115-121.

Shulman, L. S. (1999). Taking learning seriously. *Change*, *31*(4), 10-17.

- Spiro, R. J., Feltovich, P. J., Jacobson, M. J., & Coulson, R. L. (1992). Cognitive flexibility, constructivism, and hypertext: Random access instruction for advanced knowledge acquisition in ill-structured domains. In T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the technology of instruction: A conversation*. Hillsdale, NJ: Erlbaum.
- Waltner-Toews, Kay, J. J., Neudoerffer, C., & Gitau, T. (2008). Perspective changes everything: managing ecosystems from the inside out. *Front Ecol Environ* 1, 23-30.
- Wiggins, G. P., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.



IDENTIFICATION OF GENDER DIFFERENCES IN MATHEMATICS PERFORMANCE ON THE NORTHWEST EVALUATION ASSOCIATION (NWEA) MEASURES OF ACADEMIC PROGRESS (MAP) TEST DATA IN COLOMBIA, SOUTH AMERICA

Jack Jackson Colegio Jorge Washington Cartagena, Colombia <u>jackjackson@cojowa.edu.co</u>

Rose M. McNeese The University of Southern Mississippi Hattiesburg, MS 39406 <u>rose.mcneese@usm.edu</u>

Abstract

Historically, equal opportunity in education was an elusive dream for most women. While struggling for decades to participate in science, technology, engineering, or mathematics (STEM) fields, it was not until recently history that many of the obstacles and hardships that effectively deterred female participation have been overcome. This study sought to determine if there are significant gender differences in the mathematics performance of students attending institutions accredited through the Southern Association of Colleges and Schools (SACS) in Colombia, South America, on the Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) performance assessments. The primary question was whether male and female mathematics performance of students differ significantly at specific grades and/or across grade levels in the tested mathematics domains of computation, number sense, geometry, measurement, statistic and probability, algebraic concepts, and problem solving. Participants in the study included 2,494 students from grades Kindergarten to 10th grade. Independent t-tests, used to investigate differences in MAP scores, revealed significant gender differences by grade level and by domain. Kindergarten girls scored significantly higher than boys in most areas; however, boys tended to score significantly higher than girls in 5th, 6th, and 7th grades. In analyzing the results, possible explanations for the gender differences were considered.



Keywords: Gender differences; Mathematics assessments

Introduction

Historically, equal opportunity in education has been an elusive dream for most women. While struggling for decades to participate in science, technology, engineering, and mathematics (STEM) fields, it was not until recently history that many of the obstacles and hardships that effectively deterred female participation have been overcome. Though significant changes have taken place since WWII, and although women have progressed in post-secondary representation (Smith and White, 2007), there still exist large differences in gender representation in STEM fields in the United States and abroad.

Colombian women represent the majority of students (52%) enrolled in universities nationwide and they enroll in STEM programs at higher rates than Colombian males. While many women in Colombia continue to pursue careers typically associated with high levels of female participation, such as health care and education, unlike many developed nations, more women than men now choose to enter fields traditionally associated with males. However, as in the U.S. and elsewhere, there exists an underrepresentation of females in Colombia in degree programs beyond the bachelor level, with female representation among doctorate students falling to 38%.

Liu & Wilson (2008) reported that individual decision-making processes that occur prior to university enrolment may provide insight as to how choices are made with regard to pursuing a STEM career. Formative career decisions begin early, and much of the deliberation process is shaped by primary and secondary experiences with mathematics. Among primary and secondary efforts to promote positive female participation in STEM studies is to identify areas of weak performance for girls in mathematics and provide support to learning environment that are sensitive to the learning needs of girls. Performance data on math assessments may reveal where specific gender differences exist in math learning, and may provide guidance as to which instructional interventions may appropriately address performance differences and increase success with mathematics (Liu & Wilson, 2009).



North Western Evaluation Association (NWEA) Measures of Academic Progress (MAP) mathematics tests provide detailed individualized data on student growth and gender differences in performance in computation, number sense, geometry, statistics and probability, measurement, algebra, and problem solving. By using NWEA evaluation data to improve instruction in targeted areas of math difficultly, educators may help students experience greater success with overall math performance and open more post-secondary doors of opportunity to STEM studies upon graduation.

The focus of the project was to analyze NWEA MAP test data from students attending schools accredited by the Southern Association of Colleges and Schools (SACS) in Colombia for gender differences in math performance. The rationale behind this study is to ensure that the math talent of female students attending SACS schools in Colombia, are provided with a full range of educational opportunities with regard to math and science.

Literature Review

Gender Differences in STEM Participation

It is arguable that the underrepresentation of women in the fields of science, technology, engineering, and mathematics (STEM) is due to the lingering effects of educational and social, emotional, and psychological conditions that have historically suppressed female talent and career opportunities (Ayalon, 2003; Lips, 2004; & Schoon & Parson, 2001). These conditions begin to erode academic potential from the earliest years of formal schooling, and they continue to work against female participation in STEM fields until graduation and beyond. Early experiences with mathematics are critical to girls' interest in pursuing STEM careers (Ayalon, 2003), as these experiences shape the early impressions and are reflected in girls' perceptions about career and educational opportunities (Lips, 2004). Although female representation in most STEM fields has increased steadily over the last four



decades, the "pipeline" of academia is of a state that continues to favor male participation in most STEM fields (Correll, 2001).

Barriers to STEM Studies for Young Women and Girls

Social, cultural, and psychological barriers. The stepping-stones to STEM careers are laid early on in the education experiences of young students (Liu & Wilson, 2009). Using data from college applicants, Ayalon (2003) revealed that pre-college enrolment in advanced math and science courses did not reduce the gender gap in applications to mathematically oriented STEM fields. VanLuevan (2004) found that the most common reason for the abandonment of a STEM career expectation was a negative view of mathematics. In addition, three times the number of girls expressed decreased interest in math careers than did girls expressing increased interest in math careers. Lips (2004) investigated the self-ratings of young women at the high school and undergraduate levels in relation to their measure of selfconfidence in pursuing studies in STEM and found young males self-reporting higher levels of ability and interest in STEM fields than for females. Thompson and Dinnell (2007) added that when performing mathematical tasks where failure would result in direct criticism focusing specifically on lack of ability, female students with high levels of self-worth protection withdrew to avoid the lesser of two negative consequences of failure as a face-saving self-enhancement mechanism to protect and maintain the selfimage. Crosnoe, Riegle-Crumb & Muller (2007) explored the "looking-glass self" or the self-image that an individual constructs through interpretations of responses of others to the self through social interactions that trigger emotional responses and found that girls consistently downgraded their intelligence and abilities more often than their male peers. Frenzel, Pekrun & Goetz (2009) found that affective emotions and psychological well-being are key characteristics for learning mathematics or other STEM participation. They also found that girls experienced far less enjoyment and pride, and more anxiety, shame, and hopelessness than boys in relation to the study of mathematics.



Assessment and evaluation formats that misrepresent ability. Investigations of gender differences in math performance include studies on how assessment instruments potentially shape gender outcomes on assessments, thus shaping assumptions about female performance. There are two primary areas of item related research: differences in gender performance between domains on mathematics tests, and test question design (Liu & Wilson, 2009).

They found that boys scored consistently higher than girls in content domains using the same data sets, complex multiple-choice items, and space and shape test items. DeMars (2000) found that when tested on the same content, boys performed better than girls on multiple choice questions, and girls performed better than boys on constructed response questions while both boys and girls performed relatively better with high stakes tests over low stakes tests.

Reversing the Gender Gap at the Secondary Level

The Institute of Education Sciences (IES) outlined five primary recommendations for educational institutions and instructors for the improvement of female participation in math and science (Halpern, Aronson, Reimer, Simpkins, Star, & Wentzel, 2007). They should:

(1) Teach students that academic abilities are expandable and improvable and how to understand the nature of learning, not allowing their present-day skill deficits to hamper future educational expectations;

(2) Provide prescriptive, informational feedback that praises effort and persistence, rather than intelligence and ability;

(3) Expose female students to female role models who have succeeded in math and science;

(4) Create classroom environments that are inviting to girls and cultivate girls' curiosity in pursuing math and science; and

(5) Provide spatial skills training during classroom activities.



International View

Adolescent girls in the United States (US) are characteristically vulnerable to negative external messages and need additional encouragement to persevere and take on the demands of studies that require higher level math (Reis & Graham, 2005). A study of female representation at international mathematical competitions, where competitors possess some of the highest level of math talent in the world, reveals much about the forces of modern society that cultivate female talent (Andreescu, Gallian, Kane, & Mertz, 2008). The authors discovered that many nations cultivate higher percentages of elite female talent than the US, which they attribute to common characteristics within the educational systems in the U.S. that sustain the conditions which discourage and/or under-identify girls with high mathematical abilities. They contend it is commonly the ostracism that girls in the U.S. feel when demonstrating exceptional mathematical talent outside accepted social norms that cause girls to sabotage expressions of their talents for the comfort of peer companionship.

Methodology

The goals of this project were:

- To discover if any significant differences exist between male and female performance on the NWEA MAP test data in SACS schools in Colombia by grade level and
- To discover if any significant differences exist between male and female performance on the NWEA MAP test data in SACS schools in Colombia by math domain.

The two-tailed null hypothesis for this study is:

 H_0 : $m_f = m_m$. There is no significant difference between boys and girls mean performance in the tested math domains.

This was tested against the alternative hypothesis:



 H_A : $m_f^1 m_m$ - There are significant differences between boys and girls mean performance in the tested math domains.

Data Collection

The primary focus of this study was to discover if there are there significant differences between boys and girls from SACS schools in Colombia on NWEA MAP tests by grade level in goal performance areas of computation, number sense, geometry, measurement, statistics and probability, algebraic concepts, and/or problem solving.

This project was made possible through the collaboration of several SACS accredited schools located in Colombia. All of the participating schools follow a traditional, 180-day school calendar. The NWEA MAP test data for this study was collected from testing sessions held at the end of spring semester, 2009.

NWEA MAP tests in mathematics are adaptive, computer-based assessments that measured student performance in computation, number sense, geometry, statistics and probability, measurement, algebra, and problem solving. Each test has a maximum of 52 multiple choice questions and is untimed. Test performance is measured and reported using an equal interval Rasch Unit (RIT) scale representing the continuum of difficulty level of the tested skills. Test results are not tied to age groups or grade levels, thus the reported RIT scores are stable and allow for comparison between ages and grade levels. More importantly, this system provides a convenient format for measuring individual student growth over time.

Participants

The data used in this study were gathered from primary and secondary students attending SACS accredited schools in Colombia where dual-degree programs are offered. Students graduating from these schools follow a schedule of courses that satisfy both the Colombian Ministry of Education and SACS. The combination of Colombian and U.S. curricula places rigid, intensive, and often inflexible



restrictions on primary and secondary mathematics programs. In addition, by Colombian law, all students are required to take one year of pre-calculus and one year of calculus. Boys and girls in SACS schools in Colombia follow similar math course sequences and are required to provide math instruction in English, most often relying on native-level English speakers trained in the U.S. or Canada. More than 90% of the students involved in this study speak Spanish as a first language, and most schools enjoy 100% college placement.

Results

Two tailed T-tests (p=.05) were performed by gender, grade level, and goal performance area (computation, number sense, geometry, measurement, statistics and probability, algebraic concepts, and problem solving) on data collected from students (n=2494) in kindergarten through tenth grade who took the NWEA MAP test in Mathematics in the spring of 2009 (See Table 1) to determine if significant differences exist between boys and girls (See Table 1).

T-test results indicate that girls scored significantly higher than boys in computation (p=.0001), number sense (p=.001), geometry and measurement (p=.004), algebraic concepts (p=.02), and problem solving (p=.0006) in kindergarten. Girls in the first grade scored significantly higher than boys in measurement and geometry (p=.04). In the fourth grade, girls scored significantly higher than boys in computation (p=.04). Eighth grade girls scored significantly higher than boys in statistics and probability (p=.02), and problem solving (p=.01).

In third grade, boys scored significantly higher than girls in statistics and probability (p=.04). Fifth grade boys scored significantly higher than girls in number sense (p=.04), measurement (p=.02), and statistics and probability (p=.02). Sixth grade boys scored significantly higher than girls in computation (p=.01). Seventh grade boys scored significantly higher than girls in computation (p=.009),



geometry (p=.003), and measurement (p=.0007). Ninth grade boys scored significantly higher than girls in measurement (p=.007), and statistics and probability (p=.000002).

Discussion

Prior to a discussion of the data, consideration must be given to the impact of the language of the testing instrument on the performance of second language learners. Language considerations may help explain when and where gender differences in math are related to gender differences in reading abilities.

Disaggregated data reveal math performance areas where significant gaps exist in the performance of students by gender. Kindergarten, fifth, sixth, and seventh grades appear to contain largest gaps in gender performance by goal area. The differences between boys and girls performance in the eighth, ninth, and tenth grades are not as widespread as in previous grades, however boys tend to dominate most domains at these grades. Eighth grade girls scored significantly higher than the boys in problem solving (p=.01), however their dominance in statistics and probability (p=.03) is short lived, as ninth grade boys scored much higher than girls in statistics and probability (p=2.0E-06) and also in measurement. There were no significant differences between boys and girls in the tenth grade, however the boys tend to dominate.

Although these figures indicate that gender differences seem to equalize toward graduation, the impact of the observed math difficulties from previous grades may persist, possibly as a lingering female negativity toward math. While the differences are not of the magnitude as those in earlier grades, small differences in scores have the potential to reflect larger differences in career trajectories and academic decisions. Future research on gender differences toward math should focus on how attitudes between high school students differ by gender in a climate where performance is almost equal.



Beginning in fifth grade and continuing through seventh grade, the data indicates a span of grades where boys show much higher levels of math performance. The decline of girl's performance at this stage is alarming as it is the time when young women begin to shape their career expectations and make important decisions about their future math and science efforts. Seventh grade is also the point where many students traditionally begin mathematics courses that are increasingly focused on specific mathematics domains, for example, algebra, geometry, trigonometry and calculus. SACS schools in Colombia should take a closer look at their late primary and early middle school girl's mathematics experiences to ensure that these students get the assistance they need to experience mathematics success before enrolling in high school.

In the present case, the high performance level of kindergarten girls can certainly be related to their higher level of early understanding of the English language. NWEA tests for the primary grades of kindergarten, 1st, and 2nd are performed with headphones, where the child listens to and/or reads the problem. Given a strong correlation between language ability and understanding the problems exists for our kindergarten students, gender differences in pre-kinder second language development and pre-kinder English language building activities should be an area for further investigation.



1

	Kinder		1st		2nd		3rd		4th		5th		6th		7th	
	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Во
utation	165.5	155.0	182.6	182.1	187.4	189.2	194.8	198.1	206.1	202.8	217.0	218.9	217.6	221.8	222.2	22
t) two-tail	0.0002		0.79		0.51		0.08		0.05		0.34		0.01		0.01	
oer sense	157.2	147.3	181.0	179.2	179.6	182.8	196.2	198.1	203.8	201.9	214.5	218.6	219.5	222.9	223.0	22
t) two-tail	0.002		0.57		0.33		0.33		0.25		0.050		0.059		0.01	
etry*	158.6	147.6	179.8	173.6	181.6	182.3	201.3	202.0	206.2	205.2	216.8	219.1	216.9	220.3	219.7	22
t) two-tail	0.004		0.047		0.82		0.71		0.53		0.25		0.057		0.004	
urement*	158.6	147.6	179.8	173.6	181.6	182.3	197.5	200.5	204.1	203.6	214.5	218.8	220.9	223.4	219.6	22
t) two-tail	0.004		0.047		0.82		0.10		0.77		0.03		0.19		0.001	
& prob.	150.0	145.6	175.6	172.6	176.4	178.0	197.0	200.7	204.2	205.7	212.8	217.0	220.8	223.1	222.8	22
t) two-tail	0.16		0.38		0.61		0.04		0.35		0.03		0.18		0.11	
oncepts	157.0	150.0	184.3	177.5	186.7	187.3	201.2	201.6	207.4	206.1	216.6	218.6	220.2	222.6	222.8	22
t) two-tail	0.03		0.06		0.84		0.85		0.41		0.24		0.13		0.062	
solving	158.6	150.0	179.2	175.6	182.4	182.9	199.1	200.7	205.6	205.4	213.8	216.7	218.1	219.6	220.0	22
t) two-tail	0.0006		0.25		0.89		0.39		0.88		0.12		0.41		0.08	
		Areas v	vhere t s	cores ar	e signifi	cantly in	favor o	f girls			Areas v	vhere t	scores ai	re notab	oly in favo	or o
		Areas v	vhere t s	cores ar	e signifi	cantly in	favor o	f boys		* Geon	netry an	d measu	irement	in kinde	ergarten,	1st

t Scores and Mean for Boys and Girls by Grade and by Goal Performance Area (p .05)

References

Andreescu, T., Gallian, J. A., Kane, J. M., & Mertz, J. E. (2008). Cross-cultural analysis of students with

exceptional talent in mathematical problem solving. November 2008 Notices of the AMS, 55

(10), 1248-1261. Retrieved October 8, 2009, from

http://www.ams.org/notices/200810/fea-gallian.pdf

Ayalon, H. (2003). Women and men go to university: Mathematical background and gender differences

in choice of field in higher education. Sex Roles, 48 (5), 277-290. Retrieved September 25, 2009,

from http://ejournals.ebsco.com/direct.asp?ArticleID=7J6MRY5FQPT5RXW1P2EK

- Correll, S. (2001). Gender and the career choice process: The role of biased self-assessments. *American Journal of Sociology, 106* (6). 1691–730. Retrieved September 25, 2009, from http://www.uiowa.edu/~c07b150/correll_article.pdf
- Crosnoe, R., Riegle-Crumb, C., & Muller, C. (2007). Gender, self-perception, and academic problems in high school. *Social Problems, 54* (1). 118-138. Retrieved September 19, 2009, from http://ejournals.ebsco.com/direct.asp?ArticleID=4B9095B0EFE8A836F02B
- DeMars, C. (2000). Test stakes and item format interactions. Applied Measurement in Education, 13 (1).55-77.RetrievedSeptember10,2009,from

http://ejournals.ebsco.com/direct.asp?ArticleID=MT9JQRNK2AF6MLB5YWEB

Frenzel, A. C., Pekrun, R., & Goetz, T. (2007). Girls and mathematics -- A "hopeless" issue? A controlvalue approach to gender differences in emotions towards mathematics. European Journal of Psychology of Education – EJPE, 22 (4). 497-514. Retrieved Novemb34 3, 2009, from http://p2048-

lynx.lib.usm.edu.logon.lynx.lib.usm.edu/login?url=http://search.ebscohost.com.logon.lynx.lib.us m.edu/login.aspx?direct=true&db=aph&AN=28832875&site=ehost-live

- Halpern, D., Aronson, J., Reimer, N., Simpkins, S., Star, J., & Wentzel, K. (2007). Encouraging Girlsin Math and Science (NCER 2007-2003). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Retrieved September 28, 2009, from http://ncer.ed.gov.
- Lips, H. (2004). The gender gap in possible selves: Divergence of academic self-views among high school and university students. *Sex Roles,50* (5-6). 357-371. Retrieved September 28, 2009, from http://ejournals.ebsco.com/direct.asp?ArticleID=J013QP13727X262L

Liu, O. & Wilson, M. (2009). Gender differences in large-scale math assessments: PISA Trend



2000 and 2003. Applied Measurement in Education, 22 (2). 164 – 184. Retrieved November 5, 2009, from http://dx.doi.org/10.1080/08957340902754635

DOI: 10.1080/08957340902754635

Reis, S. M., & Graham, C. (2005). Needed: Teachers to encourage girls in math, science, and technology. *Gifted Child Today, 28* (3). 14-21. Retrieved October 1, 2009, from

http://web.ebscohost.com.logon.lynx.lib.usm.edu/ehost/detail?vid=4&hid=103&sid=fedc33c2-3ffe-

47d6-a306-

9f3b7842050a%40sessionmgr104&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=eric&AN=EJ 694016

- Schoon, I., & Parsons, S. (2002). Teenage aspirations for future careers and occupational outcomes. *Journal of Vocational Behavior, 50* (2). 262-288. Retrieved September 28, 2009, from http://ejournals.ebsco.com/direct.asp?ArticleID=41CV5H5C3CNB6GV64WBM
- Smith, J. L., & White, P. H. (2002). An examination of implicitly activated, explicitly activated, and nullified stereotypes on mathematical performance: It's not just a woman's issue. *Sex Roles, 47* (3-4). 179-191. Retrieved September 15, 2009, from http://ejournals.ebsco.com/direct.asp?ArticleID=0M6CUR5GCKLN994175X9
- Thompson, T., & Dinnel, D. L. (2007). Poor performance in mathematics: Is there a basis for a self-worth explanation for women? *Educational Psychology, 27* (3). 377-399. http://ejournals.ebsco.com/direct.asp?ArticleID=437ABE3BC07F094D3AB6
- VanLuevan, P. (2004). Young women's science/mathematics career goals from seventh grade to high school graduation. *Journal of Educational Research*, 97 (5). 248-268. http://ejournals.ebsco.com/direct.asp?ArticleID=4F748C7B84986EB6



MEASURING THE EFFECTS OF ATTENDANCE ON STUDENT PERFORMANCE IN LARGE SECTIONS OF PRINCIPLES OF ECONOMICS

Chris Kauffman Business Administration Program Tusculum College Knoxville, TN 37923 <u>ckauffman@tusculum.edu</u>

Abstract

Student attendance at lectures in economics courses is a widely discussed issue. There have been several articles that have examined the issue of attendance on student performance, yet most studies only analyze attendance effects in smaller classes or upper level courses in economics. This paper estimates the grade effects from attendance in large Principle of Economics classes using ordinary least squares. The results indicate that attendance did have a significant impact on student exam performance. In addition, several other variables had large effects on student exam grades including the students' GPAs and Math ACT scores. Similar to previous studies that examined small classes, student ability and class attendance are both important factors in determining grades for large Principle of Economics courses.

Keywords: Economics, Education, Attendance

Introduction

Many papers have examined the effect of attendance on student performance in economics courses. Several studies have applied different econometric techniques to test these effects in specific courses, while others have examined such impacts across a variety of courses. The importance of the effect of attendance on student performance can be summed up from Romer (1993), in which he states "lectures and other class meetings are a primary means of instruction in almost all undergraduate classes." Since lectures are such an important part of undergraduate courses, student attendance of these lectures is also potentially important. The impacts of attendance on student performance could also spill over into



whether or not student learning is impacted by attendance because grades are used as the primary source to indicate student learning. If attendance were to have large affects on grades, then attendance may lead to additional student learning opportunities. Findings from studies on attendance could be used when considering class structures, such as lecture versus internet classes, or by instructors when determining their attendance policies.

Previous work on attendance impacts has only been done using smaller classroom settings. This paper differs by examining the grade effects from attendance in large Principle of Economics classes, with 150 to over 200 students. The dynamics of large auditorium classes are different than the small classroom environment. Although human interaction still occurs in lecture classes, one-on-one interaction and class discussion may be limited which could impact the way attendance affects student performance in large classes. In addition to attendance, many other variables that could impact a student's performance will be examined using ordinary least squares. However, the key variable to be examined is the attendance and its affect on a student's course grade.

There have been several articles that have examined the issue of attendance on student performance, yet most studies only analyze attendance effects in smaller classes or upper level courses in economics. Studies that have examined attendance in smaller classes or upper level courses include: Browne, et al (1991); Romer (1993); Marburger (2001); Durden and Ellis (1995); Park and Kerr (1990).

The data for this paper were collected by surveying students in a Principles of Economics class, with more than 150 students in each class. A list of the variables and their definitions are reported in Table 1. The descriptive statistics of each variable are listed in Table 2. Tests for multicollinearity were conducted, the pair-wise correlations and Klein's auxiliary regression rule, that indicated that the level of multicollinearity between variables was low.

Empirical Results



The results of the Ordinary Least Squares (OLS) estimation are shown in Table 3. The key determinant

examined in this paper is attendance, which is measured by the ABSENT variable in the estimation. The

Table 1 - Description of Variables						
Variables	Description					
GRADE	Student's Grade Calculated from the Average of the First Two Exam Scores					
GPA	The Student's Cumulative GPA					
CRHRS	Number of Credit Hours the Student is taking					
WORK	The Number of hours a Student Works each Week					
MACT	The Student's Math ACT Score					
ABSENT	The Number of lectures missed as reported by the student					
ABSENTLAB	The Number of lab classes missed as reported by the student					
STUDY	The Number of Hours that a Student Studied each week					
MALE	Dummy Variable: 1 if Male, 0 if Female					
FRAT	Dummy Variable: 1 if Student is a Fraternity or Sorority Member					
ECON	Dummy Variable: 1 if Student had a Previous Economics Course					
CALC	Dummy Variable: 1 if Student has taken a Calculus Course					
PROF1	Dummy Variable: 1 if Student had Professor 1 for Class					
PROF2	Dummy Variable: 1 if Student had Professor 2 for Class					
PROF3	Dummy Variable: 1 if Student had Professor 3 for Class					

Ta	Table 2 - Descriptive Statistics					
Variable	Mean	Standard Deviation	Min	Max		
GRADE	77.4224	10.352	43	100		
GPA	3.0829	0.5597	1.23	4		
CRHRS	14.933	1.814	8	21		
WORK	10.5392	11.187	0	45		
MACT	24.5752	4.269	9	36		
ABSENT	5.7647	5.214	0	26		
ABSENTLAB	0.9624	1.348	0	8		
STUDY	2.1928	1.368	0	10		
MALE	0.5637	0.496	0	1		
FRAT	0.2761	0.448	0	1		
ECON	0.2353	0.425	0	1		
CALC	0.7075	0.455	0	1		
PROF1	0.4771	0.4999	0	1		
PROF2	0.183	0.387	0	1		
PROF3	0.1552	0.3624	0	1		



attendance variable was found to be negative and significant in the estimation. This indicates that attendance does have a significant impact on student grades in large Principles of Economics classes. As students miss more lectures, their grades subsequently decline. This result, which examined impacts of attendance in large classes, is similar to many of the earlier studies that found attendance to be significant in small classes. Even in large classes, where interaction between instructors and students is limited, students gain benefits by having an instructor physically in the classroom. Students that attend class more often received higher grades and potentially additional student learning. Instructors should consider these attendance impacts when deciding on attendance policies because attendance appears to positively impact student performance in both small and large classes. In addition, these findings could be very useful given the move to more internet and distance learning classes. By not having human contact hours, students may miss an important learning tool provided by lectures and traditional course structures. Therefore, the benefits of even limited student-instructor interaction should not be taken lightly.



Table 3 - Ordinary Least Squares Results				
Variable	Coefficient	<u>t – Statistics</u>		
CONSTANT***	40.1263	10.2451		
GPA***	8.2648	12.9051		
CRHRS	-0.1747	-0.8691		
WORK*	-0.0572	-1.7329		
MACT***	0.6329	7.5527		
ABSENT**	-0.1641	-2.2449		
ABSENTLAB	0.0266	0.0898		
STUDY	0.2079	0.8306		
MALE***	2.1277	3.0026		
FRAT	-0.9645	-1.1524		
ECON	0.3654	0.4792		
CALC	0.7776	1.062		
PROF1	-1.2551	-1.2963		
PROF2***	-4.3698	-3.8463		
PROF3	-1.4948	-1.4904		
R – Squared 0.3809				

***Indicates significance at the 99 percent level **Indicates significance at the 95 percent level

*Indicates significance at the 90 percent level



Of the other variables, GPA and MACT both have significant and positive coefficients in the estimation. As a student's GPA or Math ACT score rises, the OLS coefficients indicate that the student's exam average should rise. The results indicate that a student's general intellectual ability is very important and may be the most important factor in determining a student's grade in Principles of Economics. The impact of student effort is difficult to measure on its own and may be incorporated in the values of the GPA and MACT variables. Students who get higher grades may put more effort into their work, which would cause them to have higher GPAs overall. Therefore, the magnitudes of the GPA and MACT variables may be larger due to effort which is not observable. The variable WORK is significant and has a negative coefficient in the estimation. Thus, the more hours a student works, the lower the exam average. Two other interesting variables were significant. The first is the PROF2 dummy variable, which was negative and significant, and reflects the student's instructor as PROF2 or not PROF2. If the student had PROF2 for class, then the average of the exams will decrease. Each instructor creates and administers his or her own exam, so this result could be dependent on several factors including the difficulty of the exams, the information given to students about the exams, the ability of the instructor, or a variety of instructor specific variables. Thereby, this result indicates that a course instructor impacts student grades.

The second variable of interest is MALE, a dummy indicating gender differences. One might not expect that gender affects student grades. However, in this estimation the MALE variable was positive and significant indicating that males had higher averages on the exams. Many studies have examined gender effects on economics grades. Some, such as Durden and Ellis (1995), Brasfield et al (1993), and Williams et al (1992), find that gender does not impact student grades. Others though, such as Heath (1989), Lumsden and Scott (1987), and Siegfield (1979), find that gender is a significant determinant of



economics grades. Therefore, more work still needs to be done on the gender effects in economics classes. The rest of the variables were found to have insignificant impacts on economics grades.

Conclusions

This paper used ordinary least squares to provide evidence of the effects of attendance on student grades in large sections of Principles of Economics classes. The results indicate that attendance did have significant impacts on student exam performance in the large classes. Besides attendance, the variables that had the largest effects on student exam grades were the students' GPAs and Math ACT scores. All of the results indicate that student ability and attendance are both large factors in determining grades and could be important factors in determining overall student learning. These results are similar to the previous studies that show that attendance is an important variable for student performance in small classes. Therefore, attendance impacts should not be discounted in large classes because students seem to receive additional learning enhancements from attendance and student-instructor interaction, even when the interaction may be limited.

References

- Brasfield, David; Harrison, Dannie & McCoy, James. (1993). The Impact of High School Economics on the College Principles of Economics Course. *Journal of Economic Education, 24*(Spring), 99-111.
- Browne, Neil; Hoag, John; Wheeler, Mark, & Boudreau, Nancy. (1991). The Impacts of Teachers in Economic Classrooms. *Journal of Economics*, *17*, 25-30.
- Durden, Garey, & Ellis, Larry. (1995). The Effects of Attendance on Student Learning in Principles of Economics. *American Economic Review*, *85*(May), 343-346.

Greene, William. (2000). Econometric Analysis. New Jersey: Prentice Hall.

Heath, Julia. (1989). The An Econometric Model of the Role of Gender in Economic Education. *American Economic Review, 79*(2), 226-230.



- Lumsden, Keith, & Scott, Alex. (1987). The Economic Student Re-examined: Male-Female Differences in Comprehension. *Journal of Economic Education, 18*(Fall), 365-375.
- Marburger, Daniel. (2001). Absenteeism and Undergraduate Exam Performance. *Journal of Economic Education, 32*(Spring), 99-109.
- Park, Kang, & Kerr, Peter. (1990). Determinants of Academic Performance: A Multinomial Logit Approach. *Journal of Economic Education*, *21*(Spring), 101-111.
- Romer, David. (1993). Do Students Go to Class? Should They? *Journal of Economic Perspectives,* 7(Summer), 167-174.
- Siegfried, John. (1979). Male-Female Differences in Economic Education: A Survey. *Journal of Economic Education*, *10*(Spring), 1-11.
- Williams, Mary; Walauer, Charles, & Duggal, Vijaya. (1992). Gender Differences in Economic Knowledge: An Extension of the Analysis. *Journal of Economic Education, 23*(Summer), 219-231.



USING A COLLABORATIVE LEADERSHIP MODEL IN A TEACHER EDUCATION PROGRAM

Nancy J. Keiser North Central College Naperville, IL 60540 <u>njkeiser@noctrl.edu</u>

Maureen Kincaid North Central College Naperville, IL 60540 <u>mkincaid@noctrl.edu</u>

Kristine Servais North Central College Naperville, IL 60540 <u>kservais@noctri.edu</u>

Abstract

The implementation of a collaborative leadership model resulted in numerous benefits and challenges for a teacher education program in a small, liberal arts college. Areas impacted by the new model included the transformation of department meetings and student teaching orientation meetings, the development of a secondary education liaison committee, and the development of a student monitoring process. Benefits of the use of the Raelin model resulted in a positive increase in the quality of the program, faculty productivity, and cultural benefits. Most significant was the benefit to the candidates in the teacher education program. The development of collaborative leadership also resulted in new challenges. This Department of Education faced a dramatically different way of functioning as a department moving from single traditional leadership to the collaborative approach implemented by the department's Leadership Team. This paper shares the challenges and implications for education programs that may desire to use a model of distributive leadership to improve teacher preparation and increase productivity among faculty members.

Keywords: collaborative leadership

Introduction



Distributive leadership is an organizational concept that suggests when leaders skillfully share responsibilities with willing members the organization is more successful. Joseph Raelin (2003), author of *Creating Leaderful Organizations: How to Bring Out Leadership in Everyone,* supports the concept that organizations can be most effective when leadership is shared (Raelin, 2003). The Raelin (2003) model identifies four tenants that increase leadership capacity and organizational success: collaborative, collective, concurrent, and compassionate. The model calls for "participation in leadership and decision making at all levels and in multiple decision processes for its members" (Raelin, 2003). Transformational leadership is a concept in which leaders transform and motivate followers through relationship building. Shared leadership occurs through a shared vision and purpose among the followers and the leader. Leaders and followers help each other to advance to a higher level of vision, performance and motivation (Burns, 1978). The Raelin (2003) model provides a blueprint to increase leadership among all members through distributive and collective leadership, and improves the likelihood for success for both the leader and its members (Raelin, 2003).

A model of shared leadership was initiated in the fall of 2005 by the Department of Education at North Central College. The model was adopted by the Department Chair, Coordinator of Teacher Education, and the Graduate Coordinator as a means to address the escalating needs of the department due to increased student enrollment, faculty work load, state program requirements, and college demands. The NCC Department of Education leaders desired a more inclusive approach for all members of the organization in order to: 1) engage in a shared leadership model which allowed more interaction among the three members that would result in greater productively; 2) promote and nurture leadership roles from other members to increase commitments to department goals; and 3) enhance a culture of compassion and caring in which department members were acknowledged and valued for their



contributions. The previous model, while adequate under the former conditions, involved a conventional, single, and often isolated role held by one person.

Impact of the Model

The adoption of the Raelin (2003) model by the NCC Education Department was a profound change for its leaders, members and the college (Raelin, 2003). The emergence of increased collaboration, collectiveness, compassion, and concurrent leadership resulted in new attitudes and behaviors from its department members, and likewise, significant cultural changes. This paper describes the four tenants of the Raelin's (2003) model, the impact of each on the department and its members, and illustrates examples of cultural change as a result of distributive leadership (Raelin, 2003). Examples of these changes included: 1) the transformation of department meetings and student teaching orientation meetings; 2) the development of a secondary education liaison committee; and 3) the development of a student monitoring process. This paper describes the positive increase in the quality of the program, faculty productivity, and cultural benefits.

Over the past four years the NCC Education Department leadership team has implemented a collaborative leadership model with team goals that included to: 1) engage in a shared leadership model to lead the department to increased faculty productively; 2) promote and nurture leadership roles from other members to increase shared commitments to department goals; and 3) create a culture which department members are acknowledged and valued for their leadership contributions.

Benefits and Outcomes

Leaders must model and emulate values critical in cultural development and change. The NCC Leadership Team made a conscious effort to develop a caring and collaborative culture. The mantra *nice matters* began with Dr. Lora Tyson and grew as a cultural norm. Candidates were indoctrinated in the classroom, through the monitoring system, in student teaching orientation meetings, and throughout



the program where faculty modeled dispositions and performance that will be expected of candidates as future educators.

As a result of collaborative leadership the NCC Education Department saw increased productively, a shared commitment to departmental goals, and improved quality of its programs. Shared leadership resulted in more members committed to take on roles that otherwise would have been assumed by one of the Leadership Team members. Raelin (2003) describes this phenomenon as "the team is experiencing collective leadership; it is not dependent on any one member, not the position leader, nor the idea initiator-everyone is participating in leadership" (Raelin, 2003). The greatest benefit of a shared leadership approach was the favorable impact on the preparation of candidates in the Teacher Education Program.

Challenges and Obstacles

The development of collaborative leadership resulted in new challenges. This liberal arts college and Education Department faced a dramatically different way of functioning in the move from single traditional leadership to the collaborative approach developed by the NCC Leadership Team. Initially some department members shared some frustration with the functioning and the blended roles of the Leadership Team. The Dean of Academic Affairs was reluctant to address three representatives of the Education Department rather than one in decision making, problem solving, and communication. However, with increased trust and consistent modeling of collaborative and compassionate leadership, this new model began to take root. Trust is the by product of leaders who are competent, demonstrate integrity, and exhibit good will toward others (Raelin, 2003). Trust in the leadership team evolved. Eventually reluctant participants became proponents of the new leadership practices and took on leadership roles for the first time.



The qualities required for shared leadership will not be embraced by all leaders or followers. The leader who exhibits compassion, social care-giving and desire to give back to their community are qualities needed for the collaborative leader and organizational members. "The leader's work is not to get people to comply but to engage them, to support them, and keep the field clear so that they can be released to do meaningful work" (Raelin, 2003). To be leaderful an individual must value community aspirations of each member of the community.

Sharing leadership allowed for ease in the development of new initiatives such as the addition of a new minor in ELL. Department meetings were collective and often celebrations of the combined work and play of the members, always taking time to recognize each other and nurture relationships among the department. While the challenges of such a model must be expected, the single most important quality required to develop and sustain a model such as Raelin's (Raelin, 2003) can be summed up in one word: collaboration. Leaders must be willing to collaboratively share responsibility and roles for organizational and cultural change to occur. As demonstrated by the NCC Education Department, when responsibilities, skills and functions of a department are shared the result is greater community and productivity. This paper is dedicated to our colleague, Dr. Lora Tyson. The Department of Education at North Central College is grateful for her leadership in creating a collaborative approach to preparing preservice

teachers where nice really does matter.

References

- J. M. Burns. (1978) *Leadership*, Harper & Row.
- J. Raelin, *Creating leaderful organizations: How to bring out leadership in Everyone*, Berrett-Koehler Publishers, 2003.



COLLABORATION: SUCCESSFUL STRATEGIES FOR WORKING TOGETHER AS CO-EDUCATORS

Deanna Keith School of Education Liberty University Lynchburg, VA 24502 <u>dlkeith@liberty.edu</u>

Andrea Beam School of Education Liberty University Lynchburg, VA 24502 <u>abeam@liberty.edu</u>

Abstract

The mandates from the 2004 Individuals with Disabilities Education Improvement Act (IDEA) and the No Child Left Behind Act (NCLB) of 2001clearly emphasize the need for school-based collaboration. Terms such as least restrictive environment and general education curriculum are used to determine appropriate services and placements for students receiving IDEA services. IDEA goes as far as to require that general education teachers attend and offer input when determining placement for a student's individual educational program. Additionally, NCLB requires that students with disabilities be included in state and district assessments and be held to the same learning standards as their peers. Meeting the needs of an increasingly diverse student population is a daunting task which research shows can best be done collaboratively (McLeskey & Waldron, 2002). It is without question that current mandates and laws lay the foundation for general and special educators to collaborate to ensure student success within the general education classrooms. Collaboration is essential to the practices of effective educators and the culture of successful schools (Friend & Cook, 2009). For successful programs to be developed and implemented, school-based collaboration must be sustained over time (Brownell & Walther-Thomas, 2002). This presentation will address essential characteristics of true collaboration and the skills effective collaborators should possess. Strategies, handouts and further references that will



focus on the collaborative relationship within the learning community will be distributed for participants.

References

- Brownell, M.T., Walther-Thomas, C (2002). An interview with Dr. Marilyn Friend. Intervention in School and Clinic, 37(4), 223-228.
- McLesky, J., & Waldron, N. L. (2002). Inclusion and school change: Teacher perceptions regarding curricular and instructional adaptations. Teacher Education and Special Education, 25, 41-54.



THE ROLE OF BRAND EQUITY IN REPUTATIONAL RANKINGSOF SPECIALTY GRADUATE PROGRAMS IN COLLEGES OF EDUCATION

Keith W. Lamb Midwestern State University Wichita Falls, TX 76308 <u>keith.lamb@mwsu.edu</u>

John L. Baier University of North Texas Denton, TX 76203-5017 <u>jack.baier@unt.edu</u>

Abstract

Seeking to identify and further understand the variables considered when ranking specialty programs in colleges of education, this research study surveyed all deans, and associate deans responsible for graduate education, at United States institutions that offer the terminal degree in at least one of the ten education specialty areas. The study utilized a three-dimension model of brand equity from the marketing literature, which included the elaboration likelihood model of persuasion. Descriptive statistics determined that research by the faculty of the specialty program is the variable most widely considered by deans and associate deans when determining reputation.

In order to determine what predicts a person's motivation to correctly rank programs, a principal components analysis was utilized as a data reduction technique, with parallel analysis determining component retention. The model identified five components which explained 66.224% of total variance. A multiple regression analysis determined that characteristics of a specialty program was the only statistically significant predictor component of motivation to correctly rank programs ($\beta = .317$, p = .008, rs2 = .865); however, a large squared structure coefficient was observed on perceived quality (rs2 = .623). Using descriptive discriminant analyses, the study found there is little evidence that marketing efforts have differing effects on groups. Further, a canonical correlation analysis that examined the



overall picture of advertising on different groups was not statistically significant at F(15, 271) = .907, p = .557, and had a relatively small effect size (Rc2 = .099).

By utilizing a theory of brand equity, the study creates a needed context in which to view reputation in higher education. The variables that were identified as important considerations generally confirm previous research; the context of how motivation, knowledge, and marketing activities affect these considerations provides a foundation for further brand equity research in higher education reputation.

Keywords: Reputation; Rankings; Quality; Brand equity; Perception



SOCIAL LEARNING THEORY AS A CONDUIT TO PATIENT COMPLIANCE THROUGH WIRELESS TECHNOLOGY

Jarrett Landor-Ngemi Southern University and A&M College Baton Rouge, LA 70802 jarrett_landor@subr.edu

Abinwi Nchise International Center for Information Technology and Development (ICITD) Southern University and A&M College Baton Rouge, LA 70802

Oneurine Ngwa International Center for Information Technology and Development (ICITD) Southern University and A&M College Baton Rouge, LA 70802

Victor Mbarika International Center for Information Technology and Development (ICITD) Southern University and A&M College Baton Rouge, LA 70802

Abstract

Social Learning Theory (SLT) is commonly regarded as a theoretical explanation for deviance and nonconforming behavior but it also provides insight on how learning takes place. SLT is a modification of Sutherland's Differential Association Theory, which focused primarily on deviance (Akers, et al., 1979). SLT however, suggests that deviant and conforming behavior alike is determined by the consequences of individual actions, i.e. rewards or punishment (Williams and McShane, 2006). Echoing and reinforcing those sentiments, Basirico et al., asserts:

While patient compliance has been much studied, little seems to have been done in everyday practice by the healthcare community. The National Health Interview Survey (2008) revealed that 56 million individuals between 18 and 65 have one or more of 12 chronic illnesses including heart disease, diabetes, arthritis, cancer, stroke, emphysema, hypertension, asthma, bronchitis, liver condition, server



migraines, and depression. Presently, only 40% of the people with chronic disease comply with their physician's recommendations, irrespective of disease, treatment, age, or sociocultural considerations. This research proposal investigates specific research questions:

RQ 1: What are inherent individual (cognitive and behavioral) and environmental barriers to patient compliance and how wireless technologies can help to address compliance issues in resource poor settings in rural Louisiana.

RQ 2: What is the impact of institutions and policies in use of mobile phones to enhance patient compliance?

Keywords: Social learning theory



A THEORETICAL APPROACH TO PRODUCT MARKET COMPETITION AND FIRMS' CAPITAL STRUCTURE DECISIONS

Cheulho Lee Florida Memorial University Miami Gardens, FL 33054 <u>Cheulho.Lee@fmuniv.edu</u>

Abstract

This article offers a theoretical model that examines the linkage between a firm's financial policy and product market competition. It is proposed here that the firm's market position and industry structure provide a new rationale for limits on the firm's borrowing. When there are rival firms, the outstanding long-term debt of a firm leads to a competitive disadvantage in the product market due to inflexibility in meeting competitive pressure from its rivals. This inflexibility emanates from the requirement of long-term debt service. If competition is intense, and the levered firm possesses no market power advantage in the product market, it would find it difficult to raise outside funds to continue its operation in the future. Competition reduces firms' cash flows and when a state of severe competition is attained, new investors will not be forthcoming with funds for the levered firm. This is because the expected cash flow is insufficient to meet their investment costs and payments to existing bondholders. The competitive disadvantage induced by long-term debt is referred to as the "market power cost of debt". This is a real cost firms have to consider when they decide on their debt policies. Thus, firms would not seek a higher level of long-term debt than rivals, unless they enjoy a relatively superior position in the product market. Since the extent of competitive pressure depends upon firms' market positions and industry structure, firms' leverage decisions become a function of their market positions and industry structure.

Keywords: Capital structure; Product market competition

Introduction



Modigliani and Miller (1958, 1963) laid an important foundation for a positive theory of financial structure by developing their famous "irrelevance propositions", using the assumption of a perfect capital market. Since that seminal work, there have been several competing theories of capital structure which develop the idea that perceived or real return streams are influenced by a firm's financing decisions. However, the present financial literature suggests that the determinants of a firm's capital structure are still subject to debate, and require further empirical investigation. Myers (1984) calls this lack of consensus the "capital structure puzzle".

One of the difficulties with current capital structure theories is that they do not consider the linkage between the output market (or input market) and a firm's financial policy. It is not difficult to conceive the fact that a firm's financial policy interacts with the product market, where the firm eventually generates cash flow. The linkage between a firm's financial policy and the product market is well documented in survey papers. Donaldson (1961) reported in his survey, that an important determinant of a firm's debt policy is its relative market position in the industry.

He noted:

"This study of corporate practice with respect to debt revealed considerable evidence of conformity in industry thinking and practice and a sensitivity to the reactions of those competitors who were considered to be near rivals" (p. 81)

Corroboration for these findings is found in a survey report authored by Scott and Johnson (1982). They reported that industry-wide leverage ratios were an important influence on a firm's leverage decisions. According to Moody's Bond Survey (1985) and S&P Rating Guide (1979), rating agencies look closely at economic variables such as pricing practices and market shares. However, it is rather surprising that we do not have much understanding of how competitive conditions in the product market are linked to firms' financial policies. If firms' financial policies are associated with the product market, represented



by market power and market structure, then this effect would be an important determinant of their financial policy.

This article presents an alternative theoretical model which examines how a firm's financial policy interacts with product market competition by taking the above problems into consideration. Further, this model generates new insights and reverses the implications of the current literature on the effects of financial structure on product market decisions. The model suggests that when there are rival firms, the outstanding long-term debt of a firm leads to a competitive disadvantage in the product market due to an inability or inflexibility in meeting competitive pressure from rival firms. The inflexibility in market competition is induced by the requirement of long-term debt service. If competition is expected to be intense in the future, and firms possess no market power advantage in the product market over one another, the more levered firm would be unable, or would find it more difficult, to raise outside funds to keep operating in the future. The more levered firm would also have a greater moral hazard problem caused by existing stockholders. Ex ante, capital markets would recognize this, and the future market valuation of the firm.

This competitive disadvantage of long-term debt would be much greater when rival firms possess a significant degree of market power. Because of the competitive disadvantage induced by long-term debt, firms would not seek to have a higher long-term debt than rival firms, unless they have a competitive advantage in the product market. This article provides cross-sectional implications about financial policies across firms and industries and improve our understanding of firms' debt policies.

References

Bamea, A., R, Haugen, and L., Senbet, (1980), A Rationale for Debt Maturity Structure and Call

Provisions in the Agency Theoretic Framework, Journal of Finance 35, 1223-1234

- Bowen, R. B., L. A. Daley, and C. C. Huber, (1982), Evidence on the Existence and Determinants of Inter-Industry Differences in Leverage, *Financial Management 2*, 10-20
- Brander, 1. A. and T. R. Lewis, (1984), Oligopoly and Financial Structure: The Limited Liability Effect, American *Economic Review 76*, 956-970
- Brander, J. A. and T. R. Lewis, (1988), Bankruptcy Costs and the Theory of Oligopoly,

Canadian Journal of Economics 21, 221-243

- Donaldson, G., (1961), Corporate Debt Capacity: A Study of Corporate Debt Policy and the Determination of Corporate Debt Capacity, Harvard Graduate School of Business Administration
- Harris, M. and A. Raviv, (1991), The Theory of Capital Structure, Journal of Finance 46, 297

355

- Maksimovic, V., (1988), Capital Structure in Repeated Oligopolies, *Rand Journal of Economics* 19, 389-407
- Maksimovic, V. and 1. Zechner, (1991), Debt, Agency Costs, and Industry Equilibrium, *Journal* of Finance 46, 1619-1644
- McAndrews, 1. 1. and L. I. Nakamura, (1992), Entry-Deterring Debt, *Journal of Money, Credit,* and Banking 24, 99-110
- Modigliani, F. and M. H. Miller, (1958), The Cost of Capital, Corporation Finance, and the Theory of Investment, *American Economic Review 48*, 261-297
- _____, (1963), Taxes and the Cost of Capital: A Correction, American Economic Review, 433-443
- Myers, S. C., (1984), The Capital Structure Puzzle, Journal of Finance 34, 575-592
- _____(1977), Determinants of Corporate Borrowing, Journal of Financial Economics 5, 147-175
- Scott, D. and D. Johnson, (1982), Financing Policies and Practices in Large Corporations,"

Financial Management 2, 51-59.



UNDERGRADUATE STUDENT'S PERCEPTION TOWARDS RECYCLING: AN ASSESSMENT OF ENVIRONMENTAL AWARENESS ON CAMPUS

Vishakha Maskey College of Business West Liberty University West Liberty, WV <u>vmaskey@westliberty.edu</u>

Abstract

Despite advantages of recycling and the responsibility of higher education institutions to be a leader in sustainability, comprehensive programs have not been established in academic institutions such as West Liberty University. One of the assumed impediments of recycling program in this area has been lack of recycling motivation among the campus community (Walden 2008). Environmental awareness and a working knowledge of the issues of conservation of resources are essential for sustainability. However, an assessment of student's knowledge and understanding towards recycling would be a first step towards sustainability on campus and establishment of a recycling program.

Studies have revealed that conservation behavior, individual commitment, and the convenience of carrying out recycling have been influential factors in recycling behavior (Lee et. al. 1995). Moreover, socio-demographic and psychographic attributes of an individual also leads to recycling behavior (Menses and Palacio, 2005). Perceived effectiveness of program is also one of the factors in performance and behavior (Moran and Hughes, 2006).

In order to investigate attitudes and behaviors of students towards, a web-based survey of West Liberty University was conducted. Survey instrument comprised of questions related to attitude towards recycling, their recycling behavior and also looked at alternate policies towards carrying out a recycling program.

Empirical results identified various beliefs, attitude and behavior of students towards recycling. Positive attitude towards environmental stewardship and their willingness to contribute towards recycling



efforts through student fees and volunteering were also found. The results also identified significant statistical differences on student's recycling behavior and attitude across disciplines and academic standing. These findings provide guidelines to strengthen education that focuses on sustainable living for all majors on campus, which will have lifelong impact in student's lives.

Keywords: environmental awareness



THE IMPACT OF A GRE PREPARATION PROGRAM ON THE ACTUAL GRE SCORES OF STUDENTS FROM A MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM

Nell McNeese School of Education and Psychology University of Southern Mississippi Hattiesburg, MS 39406 <u>Mary.McNeese@usm.edu</u>

Susan W. Bourland Provost's Office - Academic Affairs University of Southern Mississippi Hattiesburg, MS 39406 <u>susan.bourland@usm.edu</u>

Brett E. Kemker Provost's Office - Academic Affairs University of Southern Mississippi Hattiesburg, MS 39406 <u>Brett.Kemker@usm.edu</u>

Abstract

The Graduate Records Exam (GRE) practice test scores of students from the Ronald E. McNair Post Baccalaureate Achievement Program (McNair Scholars) at the University of Southern Mississippi from 2001 until 2010 were compared to their actual GRE scores to study the impact of a specifically-designed GRE preparation program. The McNair Scholars' actual GRE scores were significantly higher than their practice test scores. This finding suggests that the preparation program is useful in preparing these students for the GRE exam. The program procedures are discussed as well as the GRE exam itself.

Keywords: Graduate Records Exam (GRE), McNair Scholars Program, Graduate School, undergraduate students, GRE preparation

Introduction

Each year, according to Educational Testing Services (ETS) of Princeton, New Jersey, more than 600,000 prospective applicants for graduate schools from over 230 different countries take the GRE General Test. The scores generated by this test are used by graduate school admissions committees and



fellowship selection committees to provide additional information on a student beyond the usual transcripts and letters of recommendation. ETS advances the notion that the GRE is the only way to provide a "common measure" for comparing the qualifications of students (ETS, 2010).

ETS asserts that scores for the GRE cannot be increased through preparatory practice (Swinton & Powers, 1985). Students often feel there is little use in studying or preparing in other ways for the test because the effort is futile at best, with minimal increases, if any, in the test scores. When students do try to prepare, the attempt is often met with frustration and soon abandoned. Purchasing a generic GRE test study guide and glancing through it is about the extent of preparation for most students.

Method

Participants

Approximately 112 McNair Scholars from 20 years to 45 years were sampled in the study. Eighty one (72.3%) of the sample were female and 31 (27.7%) were male, who were within 2 semesters of graduation. Their average GPA was 3.53. Designed for first-generation, low-income college students and students from groups under-represented in graduate education, the McNair Scholars Program encourages talented undergraduate students to pursue the doctoral degree.

Materials and Procedure

GRE Instrument.

ETS reports that the quantitative reasoning section focuses on the basic concepts of arithmetic, algebra, geometry and data analysis. The verbal reasoning section of the test focuses on the respondent's ability to analyze and evaluate written material (ETS, 2010). ETS offers evidence of the GRE's validity and reliability:



Validity research and analyses establish that the test measures what it is supposed to measure. The GRE Program has documented evidence of the following types of validity in GRE tests: construct validity, content validity, predictive validity, consequential validity, and external validity.

Although ETS works to accumulate validity evidence at each stage of the delivery and scoring process, the initial impetus for validity research comes from feedback from members of the graduate school community, who provide information about the skills and abilities that they consider essential for success in graduate school (ETS, 2010).

Burton and Wang (2005) comment on the strong predictive validity of the GRE when used along with cumulative grade point averages. ETS reports that the GRE displays adequate test-retest reliability ranging from .74 to .98 (Baird & Knapp, 1981; Powers, 2001).

The GRE has been criticized for inaccurately evaluating the skills of underrepresented minorities preparing for graduate schools (Scott & Shaw, 1985; Sampson & Boyer, 2001). Walpole, Burton, Kanyi, & Jackenthal (2002) found this same indictment reported during interviews with both students and graduate faculty.

Kaplan Instrument.

While Kaplan does not report the validity and the reliability of its practice tests, it does assert that it has "developed over 130 hours of content and practice material with the largest GRE content library with over 4000 practice items and 6 full-length computer-adaptive tests" (Kaplan, 2010). The Kaplan practice tests are designed to align with the GRE.

Procedure

The McNair Scholars Program at the University of Southern Mississippi implemented a program of intensive GRE preparation designed to give the Scholars confidence and experience in taking the GRE. The Scholars start a 10-week summer research internship and GRE preparation program at the

194



beginning of the summer school session late in May. The Scholars meet approximately 4 hours per day, 3 days a week, for 10 weeks. Overall, the Scholars spend from 12-16 hours per week in class in GRE preparation and additional hours outside of class.

This time is spent with a faculty member and 4 graduate assistants conducting the study sessions. Most of the class time is spent on the verbal and quantitative sections of the test; however, the Scholars also practice on the computer and learn skills necessary for taking the CAT or computer-adapted version of the test. By practicing on the computer and gaining experience with the CAT, Scholars become more comfortable with the process and less apprehensive about taking the test.

Results

This research study examined whether there was a significant difference between McNair Scholars' Kaplan GRE practice tests and their GRE actual test scores. A paired-samples *t* test was conducted which showed that the performances on the actual GRE tests (M = 1016.88, SD = 190.74) were significantly higher than the performances on the GRE practice tests (M = 768.75, SD = 185.73), *t* (111) = -18.14, *p* < .001. The effect size, as measured by Cohen's d, was -1.72, which is a large effect.

Discussion

The results showed that the GRE preparation program under investigation was very effective in significantly improving the students' scores from a mean of 768.75 to mean of 1016.88 over the course of 10 weeks. These results do not support the assertion from ETS that students' GRE scores cannot be increased through preparatory practice (Swinton & Powers, 1985). Anecdotally, students report becoming more adept with the Verbal and Quantitative sections of the test through intensive summer study and more comfortable with the CAT-type testing by taking up to 5 practice tests throughout the period.



* This research was supported by the United States Department of Education Grant P217A070270 awarded to Susan W. Bourland.

References

- Baird, L. L. & Knapp, J. E.(1981). The inventory of documented accomplishments for graduate admissions: Results of a field trial study of its reliability, short-term correlates, and evaluation. Princeton, NJ: Educational Testing Service.
- Burton, N. W., & Wang, M. (2005). Predicting long term success in graduate school: A collaborative validity study. Princeton, NJ: Educational Testing Service.
- Educational Testing Service, (2010, August). Retrieved from: <u>http://www.ets.org/gre/general/about/fairness/</u>

Educational Testing Service (2010, August). Retrieved from: <u>http://www.ets.org/gre/general/about</u>

Kaplan, (2010, August). Retrieved from: http://www.kaptest.com/GRE/Home/index.html

- Powers, D.E. (2001). Validity of GRE general test scores for admisstion to colleges of veterinary medicine. Princeton, NJ : Educational Testing Service.
- Samson, C. & Boyer, P. (2001). GRE scores as predictors of minority students success in graduate study: An argument for change. *College Student Journal*, *35*(2), 271-279.
- Scott, R., & Shaw, M. M (1985). Black and white performance in graduate school and policy implications of the use of Graduate Record Examinations scores in admissions. *Journal of Negro Education*, 54(1), 14-23.
- Swinton, S. S. & Powers, D. E. (1985). The impact of self-study on GRE test performance. Princeton, NJ: Educational Testing Service.
- Wadpole, M. B., Burton, N. W., Kanyi, K., & Jackenthal, A. (2002). Selecting successful graduate students: In-depth interviews with GRE users. Princeton, N.J. : Educational Testing Service.



AN EXPLORATORY INVESTIGATION OF MOTIVATIONS OF COLLEGE STUDENTS TAKING ONLINE/WEB-ASSISTED COURSES AND THEIR RELATIONSHIPS WITH LEARNING OUTCOMES

Sarath Nonis College of Business Arkansas State University Jonesboro, AR 72401 <u>snonis@astate.edu</u>

Grant Fenner College of Business Arkansas State University Jonesboro, AR 72401 gfenner@live.com

Abstract

An investigation of students taking online classes exposed crucial student perceptions important to their selecting online/web-assisted courses. An exploratory factor analysis provided three factors of "convenience," "enjoyment & independence," and "no other option available" as motivations for students taking online/web-assisted courses. Positive correlations were identified linking the personal student variables of motivation and self-efficacy with the two motivations for students taking online/web-assisted courses and enjoyment & independence. However, negative relationships were revealed between the personal student variables of motivation and self-efficacy and the motivation for students taking online/web-assisted courses sisted courses when no option existed. Similar results were identified between student outcomes such as learning and learning experience satisfaction and the three motivations for taking online/web-assisted courses. Study implications are also discussed.

Keywords: Online courses; Web-assisted courses; Learning outcomes

Introduction

Online/web-assisted courses, as a delivery medium is an emerging pedagogy offering educators an opportunity to extend their reach to existing and expanded student audiences. As early as 2002, 81% of all higher education institutions in the U.S. provided at least one course online (Conhaim, 2003) and by



2006 close to 20% of all college students had completed at least one of their classes online (Allen and Seaman, 2006). Despite higher student drop rates for online/web-assisted courses compared to traditional face-to-face courses (Aron, 1999; Diaz, 2002; Frankola, 2001), increased demand by students for online courses and improvements in technology have made this an economical and practical way to increase student enrollment. But, increasing student enrollment should only be one part of an overarching strategy of complimenting traditional face-to-face teaching with online/web-assisted course curriculums. The learning experience encountered by the student ultimately determines student satisfaction and their ability to learn. For institutions using online delivery systems, it is important for their students to perceive that they receive added value for their money. If not, the brand reputation the university has worked long and hard to develop will suffer.

Most studies conducted to date show no significant difference in learning as it relates to subject matter in online classroom environments compared to traditional classroom environments (cf. Cooper, 2001; Drago, Peltier, and Sorensen 2002; Johnson et al., 2000; Weber and Lennon, 2007). However, when it comes to learning experience satisfaction of students, most studies to date have reported online/webassisted courses to score lower when compared to traditional face-to-face courses (McFarland and Hamilton, 2006; Nonis, Hunt, and Hudson, 2008). Theory and empirical research offers insights as to how the individual differences of students may influence their online/web-assisted course experiences. For example, self-learners or students who learn on their own are likely to perceive online learning to be as valuable, if not more valuable than face-to-face contact with an instructor (Priluck, 2004). Also, selfefficacy, motivation, and level of maturity of students such as age have been linked to learning outcomes in online delivery mediums (cf. Iverson, Colky, and Cyboran, 2005; Jenkins and Downs, 2003; Terry, 2007; Chen and Lou, 2002).



This study seeks to expand our understanding of student learning and learning experience satisfaction by exploring the relationships between these outcomes of interest and the different motives students hold for taking online/web-assisted courses. For instance, we will investigate the degree to which a relationship exists between student motivation or drive and academic self-efficacy with the decision a student makes to register for an online/web-assisted class. Knowledge of the different factors influencing students for taking online/web-assisted courses will help institutions of higher education to serve these students by improving their ability to tailor the online course to better serve student needs. Additionally, if relationships are revealed linking student motivations and educational outcomes such as learning and student learning satisfaction, important information will be available enabling institutions and faculty to increase both the quality of these student outcomes while simultaneously expanding student enrollment.

In summary, the three specific research objectives of this study are as follows: (1) determine the different reasons or motives for students to take online/web-assisted courses, (2) investigate relationships these different motives for taking online/web-assisted courses have with personal variables achievement striving (used as a surrogate for drive or motivations) and self-efficacy, and (3) examine the relationships these different motives for taking online/web-assisted courses have with key student outcomes of learning and learning experience satisfaction.

Methodology and Findings

Data for the study was collected from 109 undergraduate students pursuing a business degree in a medium size AACSB accredited university located in the mid-south. The business school has been providing distance education for more than a decade and started offering online courses in 2003, even though the primary mode of delivery remains be face-to-face. The survey was available to students enrolled in almost all the online courses offered during the semester and approximately 80% of those



courses were either 3rd or 4th year level. Participation was voluntary and no attempt was made to identify the respondent.

The sample consisted of 34% males and 66% females. On average, respondents had taken 7 online or web-assisted courses and their average age was 28 years. The 11-items that measured the motivations for using an online/web-assisted delivery medium came from a study conducted by Meuter et al., (2003) that focused on reasons for selecting encounters that use self-service technologies (i.e., online banking, automated hotel checkout, automated investment transactions and the like) as opposed to a personal encounter such as the face-to-face interaction with a teller. An exploratory factor analysis using a Varimax rotation of the 11-items provided 3 unique motivation dimensions with eigen values over 1 (table 1).

Variable	Factor Factor		Factor				
	1		2		3	Mean	Alpha
Fairward Q indexed						4.00	0.01
Enjoyment & independence	. 02					4.96	0.91
Enjoyment of the novelty of the technology							
Enjoyment from using technology	.92						
Provides feeling of independence	.87						
Privacy	.77						
Control over my learning	.70						
Cost savings	.47						
Convenience						6.09	0.90
Convenience			.92				
Ability to work around your schedule			.91				
Ability to work at your own pace			.84				
Ease of use			.70				
No other option available						4.04	_
No other option available					.93		

Table 1. Results from Exploratory Factor Analysis

The 3 factors also explained 78.9% of the total variation. These dimensions for taking online courses were labeled "convenience," "enjoyment & independence," and "no other option available." The 4items measuring "convenience" produced an alpha reliability=0.90, and the 6-items measuring the



dimension "enjoyment & independence" produced an alpha reliability=0.91. A single item measure "no other option available" was additionally used.

Learning experience satisfaction was measured using one item that asked students to provide their level of agreement based on a 1 (strongly disagree) to 10 (strongly agree) point Likert scale for the statement "overall I am very satisfied with the learning experience in this course." Similar one-item scales have been used to successfully measure overall satisfaction with courses in other studies (McFarland and Hamilton, 2006). Learning was measured using 3-items used by Peltier, Schibrowsky, and Drago (2007) to capture perception of quality of learning. Academic self-efficacy was measured using a scale developed by Chemers, Hu, and Garcia (2001). Lastly, achievement striving as a surrogate for drive or motivation was measured using the 6-item scale developed by (Spence, Helmreich, and Pred, 1987). All these scales have been used extensively and have demonstrated acceptable psychometric properties. In this study, all multi-item scales produced acceptable reliability coefficients (learning=0.96, academic self-efficacy=0.91, achievement-striving=0.81) as per Nunnally (1978).

Correlation coefficients illustrating the relationships between student motivations for taking online/web-assisted courses and learning, learning experience satisfaction, academic self-efficacy, and achievement striving are provided in table 2. As can be seen, the two motivations for taking online/web-assisted courses "convenience" and "enjoyment and independence" revealed positive relationships that were significant at the p < 0.05 level for both student outcomes of learning experience satisfaction and learning as well as with the personal variables of drive or motivation and academic self-efficacy. However, the dimension "no other option available" showed negative relationships with both student outcomes and the personal variables. Also, only the relationship between the personal variable achievement striving and no other option available was statistically significant at the p < 0.05 level.



		Enjoyment &	No other	
Outcome	Convenience	Independence	Option	
Drive (motivation)	0.40 ¹	0.221	-0.30 ¹	
Self-efficacy	0.43 ¹	0.30 ¹	-0.16	
Satisfaction	0.25 ¹	0.231	-0.09	
Learning experience satisfaction	0.25 ¹	0.211	-0.10	

¹Relationship is significant at the p < 0.05 level

In summary, the factor analysis in table 1 and the means and standard deviations provided in table 2 offer important insights into the first research objective concerning the different reasons for students taking online/web-assisted courses. The second and third research objectives relating to the relationships these motives have with student outcomes such as learning and learning experience satisfaction and the personal variables academic self-efficacy and achievement striving were investigated using Pearson's Correlation Coefficient.

Discussion, Implication, and Direction for Future Research

Results from factor analysis show three basic motives for students taking online/web-assisted courses. Based on the mean scores, it is encouraging to see most students taking online/web-assisted courses attributed convenience as well as the enjoyment and independence that these courses provide as important reasons for their decision for taking these courses. Note that "no other option available' was the least important reason for taking online/web-assisted courses (mean=4.04, with a maximum of 7 being "very important"). This would suggest that both convenience and enjoyment with taking online courses are trigger points influencing online course selection. The positive correlations in table 2 illustrate that as the level of achievement striving (used as a surrogate for drive or motivations) and selfefficacy increases, that student belief that online/web-assisted classes are convenient, enjoyable, and provide them independence also increases. However, the negative correlations in table 2 reveal an



inverse relationship such that when levels of achievement striving and self-efficacy drop, the student perceptions that they have limited options in course selection increase. These results underscore the importance of student motivation and their confidence that they can take control of their learning in such a class environment when engaged in distance learning by way of online courses. Lack of motivation and self-efficacy appear related to the likelihood of students feeling helpless about selecting an appropriate delivery medium that suits them. Conversely, students with high levels of motivation and self-efficacy appear to not be influenced in this manner. It is additionally important to note that achievement striving and self-efficacy, unlike many personality characteristics are individual differences that can be positively influenced or developed by faculty or course design. For instance, it is important to communicate to students and to capitalize on course design that positively influences the core dimensions of a class such as the use of multiple skills found in online learning, the autonomy related to the opportunity for the student to make critical decisions relative to achieving their own learning objectives, and the importance of timely feedback to the student by faculty with respect to student performance as a means of enhancing intrinsic motivation (Hackman & Oldham, 1972). Furthermore, a student's self-efficacy can be enhanced by equipping he/she with the tools and skills (such as technological or self-management skills) that will contribute to their confidence that they possess what it takes to succeed in an online environment (Bandura, 1986).

Results in table 2 also illustrate the positive relationships that the two motives of convenience and enjoyable & independence have with learning and learning experience satisfaction in the online classroom. Clearly these two motivators for taking online/web-assisted courses positively influence student learning and satisfaction. However, the perception that there was no other option available showed negative relationships with learning and learning experience satisfaction even though they were not statistically significant. This result seems to suggest when students perceive that they have no



choice other than to take an online/web assisted course, that their learning and learning experience satisfaction will be at risk.

These findings taken as a whole suggest important implications for institutions of higher education. First, it is important that students who register for online/web-assisted courses have high levels of motivation and self-efficacy. Both intrinsic motivation and the strength of the student's self-efficacy can be influenced by the development of a class curriculum that possesses skill variety, autonomy and feedback as well as equipping the students with the knowledge and skills to successfully navigate an online class in advance of enrolling in that class. In the absence of such preparations, students may be taking these online courses at their own risk with an increased probability of dropping these classes or performing at sub-par levels. This needs to be communicated in advance to both students during student advising and to faculty and administrators as they broaden their course curriculums to include online classes. Second, higher education institutions should consider offering students a choice of both face-to-face and online/web-assisted courses. Clearly those who feel that they have no other choice do not do as well in terms of learning and report lower levels of satisfaction with learning experiences as compared to those students who feel they had a choice. Institutions of higher education that provide students with a choice of face-to-face as well as online/web-assisted courses should communicate to students that they have a choice and that they should be proactive in looking, requesting, and registering for those courses of their choice at the time of they register for classes. Some schools may offer face-to-face sections only during a specific time periods based on semester rotations. When this occurs, this should be openly communicated to students so that they understand that face-to-face versus online options exist for them in the following term. Finally, some institutions of higher education target their non-traditional students with online/web-assisted courses since they are more likely to have families and daytime work responsibilities, making it more difficult to take classes between 8 a.m. and 5



p.m. during the traditional work-week. Although these students may have little option than to take online/web- assisted courses, our findings from this study question the wisdom of promoting or positioning online education as the only choice available for learning or receiving a college degree. Our research suggests that students wish to feel that they have a choice between face-to-face and online classes even if this means face-to-face classes on week nights or on weekends.

Our study has does have its limitations. First, a confirmatory factor analysis using a different sample should be employed to validate the three motivation dimensions for taking online/web-assisted courses. Second, the sample for this study came from a single institution, making it difficult to generalize the findings of this study to a larger population of institutions of higher learning. Collecting data from samples of students from multiple institutions will provide for greater generalizability of the findings from this study. Furthermore, the cross-sectional design this study used limits the ability to establish causality. Despite these limitations, this research offers an important first hand glimpse at why students take online/web-assisted courses and what relationships these motives demonstrate with respect to a variety of personal variables and important student outcomes which, in turn, offers important strategic choices for institutions of higher education that currently promote or intend to promote online education.

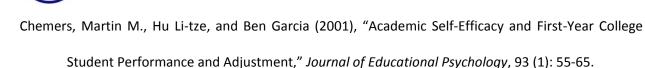
References

Allen, Elaine and Jeff Seaman (2006), "Online Nation: Five Years of Growth in Online Learning."

Retrieved August 20, 2008 from <u>http://www.sloan-c.org</u>.

Aron, Laurie Jones (1999). "Online U." Across the Board, 36 (8): 63-66.

Bandura, Albert (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.



Chen, Yining and Hao Lou (2002), "Distance Learning Technology Adoption: A Motivation perspective," *The Journal of Computer Information System*, 42 (2): 38-43.

Conhaim, Wallys W. (2003). Education Ain't What It Used to Be," Information Today, 20 (11): 37-38.

- Cooper, L.W. (2001). "A Comparison of Online and Traditional Computer Applications Classes," *Technology Horizons in Educational Journal*, 28 (8): 52-58.
- Diaz, David P. (2001). "Drop Rates Revisited," *The Technology Source Archives*, May/June. Retrieved on 8/30/2010 from http://technologysource.org/article/online_drop_rates_revisited/
- Drago, W., Peltier, J.W., and Sorensen, D. (2002), "Course Content or the Instructor: Which is More Important in On-line Teaching?" *Management Research News*, 25 (6/7): 69-78.
- Frankola, Karen (2001). "Why Online Learners Drop Out," *Workforce*, October. Retrieved on 8/30/2010 from <u>http://findarticles.com/p/articles/mi_m0FXS/is_10_80/ai_79352432/</u>
- Hackman, J. Richard., & Oldham, Greg (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16, 250-279.
- Iverson, Kathleen M., Deborah L. Colky, and Vincent Cyboran (2005), "E-Learning Takes the Lead: An Empirical Investigation of Learner Differences in Online and Classroom Delivery," *Performance Improvement Quarterly*, 18 (4): 5-18.
- Jenkins, Stephen and Elizabeth Downs (2003), "Demographic, Attitude, and Personality Differences Reported by Students Enrolled in Online Versus Traditional Courses," *Psychological Reports*, 93, 213-221.



- Johnson, S.D., Aragon, S.R., Shaik, N., and Palma, R.H. (2000), "Comparative Analysis of Learner Satisfaction and Learning Outcomes in Online and Face to face Learning Environments," *Journal of Interactive Learning Research*, 11(1): 29-49.
- McFarland, Daniel, and Diane Hamilton (2006), "Factors Affecting Student Performance and Satisfaction: Online Versus Traditional Course delivery," *The Journal of Computer Information System*," 46 (2): 25-32.
- Meuter, Matthew, Ostrom, Amy L., Bitner, Mary Jo, and Roundtree, Robert (2003). The Influence of technology Anxiety on Consumer Use and Experiences with Self-service Technologies, *Journal of Business Research*, 56, 899-906.
- Nonis, Sarath A., Hunt, Shane, C., and Hudson, Gail I. (2008). "Relationship of Student Perceptions of Instructor's Referent and Expert Power With Their Learning/Course Experience: A Comparison of Online and Traditional Classroom Learning Environments," *Association of Collegiate Marketing Educators Annual Conference*, 236-238.

Nunnally, Jon (1978). *Psychometric Methods*. 2nd Edition. New York: McGraw-Hill.

- Peltier, J.W., Schibrowsky, J.A., and Drago, W. (2007). "The Interdependence of the Factors Influencing the Perceived Quality of the Online Learning Experience: A Causal Model," *Journal of Marketing Education*, 29 (3): 140-153.
- Priluck, Randi (2004), "Web-Assisted Courses for Business Education: An Examination of Two Sections of Principles of Marketing," *Journal of Marketing Education*, 26 (August): 161-173.
- Spence, Janet T., Helmreich, Robert L., & Pred, Robert S. (1987). "Impatience Versus Achievement Striving in Type A Pattern: Differential Effects on Student's Health and Academic Achievement," *Journal of Applied Psychology*, 72 (4): 522-528.



Terry, Neil (2007), "Assessing Instruction Modes for Master of Business Administration (MBA) Courses,"

Journal of Education for Business, 82(4): 220-226.

Weber, J.M., and R. Lennon (2007), "Multi-course Comparison of Traditional Versus Web-based Course

Delivery Systems," Journal of Educators Online, 4 (2): 1-19.



ALTERNATIVES TO CORPORAL PUNISHMENT GAINING MOMENTUM IN U.S. SCHOOLS

Cynthia Northington-Purdie College of Education William Paterson University Wayne, NJ 07470 <u>northingtonc@wpunj.edu</u>

Abstract

The practice of corporal punishment is on the wane in the United States public schools. The reports and ramifications of the use of paddles, sticks and physical discomfort on students in order to enforce school rules are sobering. This is the result of the increased scrutiny under to which teachers and administrators have been subject due to this often controversial practice. Although corporal punishment is still legal in twenty of the fifty states, there has been increased interest in alternative (top down) methods of classroom management. Some states have abolished corporal punishment and reinstated it due to the perceived absence of alternatives. Realistic alternatives can be proposed and demonstrated to be effective to states that still legally practice paddling. Top-down classroom management alternative offer humane, organized guidelines to students that teach appropriate behaviors rather than merely penalizing negative behaviors.

Keywords: Corporal punishment, Public schools, Top-down management, Classroom management

Introduction

According to data released in March 2008 by the U.S. Office of Civil Rights, corporal punishment was administered legally to 223,190 public school children. U.S. Department of Education, (2001). In the 20 states in which this practice remains legal, strict guidelines are in place to protect student, teacher and administrator from cruelty and litigation. The use (and frequency of use) of a paddle, stick or physical hardship is clearly spelled out in school handbooks and web sites. School administrators report that discipline policies and procedures are adhered to before, during and after each instance (Workman et al,



2004). Despite often strict guidelines for the use of corporal punishment, lawsuits are regularly filed by the families of its recipients due to excesses use.

The argument in favor of school corporal punishment is that it signals a respect for authority. It is also stated that when fear is not a factor, there is no reason for children to comply to rules and regulations. It is perhaps for this reason that states like West Virginia for example, banned corporal punishment in the early 1990's and reestablished shortly thereafter. Spanking, it is argued, is a return to traditional values. (Northington, 2007) However, recent studies have shown that in states where students are spanked there have been more instances of school violence (included homicide and weapons-related violent death). This implies a disregard for a societal authority that prohibits violent behavior. There also appear to be more school shootings in states that have legal corporal punishment than in states that have banned it. (Arcus, 2002; Dinkes et al, 2006). Students who are empowered to bring weapons to school and utilize them on their peers are not impeded by fear of consequences.

As information about this practice and its ramifications continues to reach the public spotlight, calls for its abolishment have become more vociferous. In the 1990's eight states banned corporal punishment in the schools. In the millennia, three more states (Delaware, Pennsylvania and Ohio) have signed legislation as well. When a state terminates the practice of spanking, there is the necessity of replacing it with a model in which practitioners accustomed to traditional practices can invest.

Contemporary approaches emphasize a classroom management focus rather than discipline. Top down classroom management approaches provide schools that previously relied on corporal punishment a comfortable transition to a discipline model that emphasizes the authority of the teacher and administration without inflicting pain humiliation on a student. Classroom management is therefore achieved without completely altering a school's disciplinary conceptual framework.



Lee Canter's assertive discipline program for example, is a viable alternative in that like corporal punishment, it places the teacher firmly in charge on the classroom. Rules, rewards and punishments are determined by the teacher. Despite its humanity and authoritative philosophy, it is basically a top down approach that focuses on students who comply with school rules while providing gradations of negative reinforcement for repeat classroom offenders. There is evidence that behavior modification programs and applied behavior analysis for extreme disciplinary cases can also provide viable alternatives to the traditional disciplinary model.

In view of the trends, the top down discipline focus is a realistic first step for states that abandon corporal punishment. Imposing millennial styles of student centered classroom management before schools are ready can be a set up for failure and a return to traditional discipline. States that have never sanctioned corporal punishment for example, advocate contemporary classroom management programs such as cooperative and positive discipline, Forrest Gathercoal's, Judicious Discipline. These programs place the onus of behavior, rewards and consequences on the students and community. Teachers, administrators and students work together cooperatively to conceptualize discipline in the educational environment.

References

- Arcus, D. (2002) School shooting fatalities and school corporal punishment: A look at the states. Aggressive Behavior 28(3), 173 – 183.
- Dinkes, R., Cataldi, E.F., Kena, G., and Baum, K. (2006). Indicators of School Crime and Safety: 2006 (NCES 2007–003/NCJ 214262). U.S. Departments of Education and Justice. Washington, DC: U.S. Government Printing Office.
- Northington, C. (2007). The use of corporal punishment on minorities in public schools. In Brown, M. C. (Ed.) *Still not equal: Expanding educational opportunity in society*. New York: Peter Lang.



- U.S. Department of Education. Office of Civil Rights. (2001) Elementary and Secondary School Civil Rights Compliance Report Individual Compliance Report. ED 102, Washington, D.C.: U.S. Government Printing Office.
- Workman, J. E.; Freeburg, E. W.; Lentz-Hees, E. S. (2004). Sanctions Connected to Dress Code Violations

in Secondary School Handbooks. Journal of Family and Consumer Sciences. 96(4), 40-46.



THE IMPACT OF THE SMARTBOARD IN THE MATH CLASSROOM

Frank T. Rizza Graduate School, Department of Human Services The College of New Rochelle New Rochelle, NY 10805 <u>frizza@cnr.edu</u>

Michael Hartnagel mh2711@hotmail.com

ABSTRACT

With the introduction of Smartboards into the school system, teachers have a wide array of new tools to use in their classrooms designed to help better educate students. A few years have passed since their introduction and Smartboards have become commonplace. However, while some teachers extol its virtues, there are teachers that choose not to use this piece of technology. Each teacher makes their own decision to use their Smartboards as either a teaching tool or an expensive dust collector and each for their own reasons. With the supposed advantage a teacher using a Smartboard has, why then, are some teachers still refraining from using it? It seems that the positive impact of the new technology must be put to the test. Through student assessments, this study will attempt to determine how much a Smartboard impacts student learning, if at all.

Introduction

The interactive whiteboard has been incorporated into learning environments for over a decade, and an increasing flow of research into its impact is emerging from the United States, the United Kingdom and Australia. From the available body of research, several themes and patterns have emerged, including the positive effect interactive whiteboards have on student engagement, motivation, the ability to accommodate a variety of learning styles and the capacity to enhance student understanding and review processes (Smarttech, 2006, p. 12).



This is the claim set forth by SMART Technologies Inc., the creators of the interactive whiteboard technology, which has been dubbed the Smartboard. This case study will put this contention to the test on a slightly smaller, less international scale. Classes using the interactive whiteboard technology will be pitted against classes that refrain from using the board completely. This will give a teacher a good idea whether or not the Smartboard technology will have a positive impact on his/her own class. It will also help an administrator researching the effects of such a technology make a decision on the purchase of Smartboards for the district. These are, after all, expensive machines, at approximately \$1400 for just the Smartboard itself. This case study will determine if this steep cost is really worth the investment (Lake Havasu, 2010).

As another part of this case study, both teachers and students will be surveyed to find out how Smartboards were received. This is an important component to the case study as these individuals are using and learning from material on these boards. As such, it is important to gauge the participant's responses since it can determine if the Smartboard is effective in a classroom. A teacher that uses the Smartboard with a negative attitude towards it is less likely to use the Smartboard to the greatest effect, whereas a teacher that views the Smartboard as a tool that can enhance the learning experience in a decisive way will most likely have a better outcome. In a similar manner, students that dislike the use of the Smartboard in class are less likely to learn the material than students that enjoys the Smartboard. This study will determine all of these things, from the students to the administrators. The results will show how big an impact the Smartboard has in a math classroom, in particular, and how the teachers and students perceive the technology, which also has an effect on the Smartboard's success.

About the Smartboard

"Founded in 1987 by partners David Martin and Nancy Knowlton, SMART [Technologies Inc.] began as the Canadian distributor for a U.S. projector company" (Smarttech, 2010, p. 1). The SMART Technologies

214



Company is the "Pioneer and market leader" in producing and developing interactive whiteboards. According to SMART, the successes of their company lead to revenue being allocated to the production of the interactive whiteboard. In 1991, the first of these whiteboards was introduced and dubbed the Smartboard, after the company name. The company attributes the rise in popularity of the Smartboard to a key strategic alliance they formed in 1992 with the computer powerhouse company, the Intel Corporation (Smarttech, 2010).

The Smartboard is designed to operate with any standard personal computer or PC, that it is connected. This allows a user the ability to do anything on a Smartboard that they can normally do on a PC and demonstrate material as the interactive whiteboard shows the image of what is on the computer monitor. This whiteboard is a large touch screen that uses Digital Vision Touch, or DViT, technology (Papa, 2010). "This technology enables the user to control the whiteboard using touch for writing on the whiteboards. Built-in cameras and compatible software detect the touch inputs and translate them as the equivalent keyboard or mouse inputs" (Papa, 2010, p. 1). This, of course, only works effectively after the user orients the Smartboard by touching each of nine hot spots, one at a time (Smarttech, 2006). Four different colored "markers" allow the user to write onto the Smartboard screen in black, red, blue and green. These "markers" work with optical technology as well. While the user to put virtual writing onto whatever program is running on the computer (Rockingham, 2004).

In addition to the Smartboard itself, SMART has also developed its SMART Notebook software to run on the Smartboard. The software is geared towards educational use as a tool to enhance the learning experience in ways that normal blackboards and whiteboards could not. The SMART notebook software comes with hundreds of interactive tools, activities and games that span every content area, making the Smartboard, along with the SMART Notebook program useful tools in any subject's classroom.



How is a Smartboard Incorporated into Class Lessons?

When a teacher walks into a classroom that is equipped with a Smartboard and chooses to use it, he/she must now find a way to incorporate this relatively new piece of equipment into a classroom lesson. The teacher can find myriad lessons online to use in their classroom, but there is always the task of adapting the lesson to match the style and learning methods that are present in the class. The ways to do this or to use the Smartboard with an original piece from the teacher's repertoire ranges from extremely basic techniques to the more complex interaction using built in tools.

"The Smartboard is just like a whiteboard, only [one] can save every file, which is kind of like having digital charts" (Levy, 2009, p. 1). So an educator, who has never used a Smartboard before, without modifying any major aspect of their teaching style or lesson plan, can incorporate the Smartboard into their lesson by simply using it as a whiteboard. However, by using the computer capabilities built into the technology, any piece of the lesson, including the notes and examples, can be saved and brought up again at a later date. In addition, the saved content can also be printed for students who have missed a lesson. In the same vein, "the Smartboard provided a recording function for teachers to capture the whole lesson process" (eLeadership, 2004, p. 1). This is just the tip of the iceberg, for when a teacher uses the Smart Notebook software, they can be assured that the Smartboard "allows you to create, save, or print any lesson idea you might have" as its basic functions (Levy, 2009, p. 1). However, "there are hundreds of graphic resources in the Gallery that comes with the Notebook software, including a whole folder of math tools and paper backgrounds such as graph paper" (Levy, 2009, p. 1). The Gallery is the source of myriad possibilities for a lesson. The tools that Levy mentions include static visual aids, such as graph paper, pull tabs and other fun graphics that a teacher can use to make the Smartboard capture and hold a student's attention (Wetzel, 2009). In addition, there are many interactive tools that teachers can implement including rulers, compasses and educational games.



"Because [the Smartboard connects] directly to a computer and projects the computer screen onto the Interactive Whiteboard, teachers can pre-plan instruction which...saves teachers time" (Herman, 2009, p. 1). So yet another way to use the Smartboard is to make use of the included software prior to class time. SMART Technologies indicates through their research that "once educators have received professional development...[Smartboard] integration should mesh seamlessly...and help streamline lesson preparation, thereby increasing teacher productivity" (2006, p. 11). SMART continues on to say that the streamlining process of lesson preparation lies in the teacher's ability to more readily pinpoint important items while discarding issues that are not necessary for the lesson. In this way, students are given the most important information for their learning experience. The pre-planning also allows a teacher to use some more features of the Smartboard. Since the Smartboard is a projection of the computer, teachers are able to look up and present websites with relevant information for their classes as well as to find and inbed pertinent multimedia items such as pictures and videos from the Internet (Levy, 2009).

While the focus of the usefulness of a Smartboard lies in streamlining lesson preparation and the abilities of the software, there is more to how a Smartboard works that is often overlooked. By incorporating the Smartboard into a lesson, the teacher is using a versatile tool that helps students of all learning types and special needs.

Visual learners benefit from notes taken on the interactive whiteboard in addition to diagramming and manipulating objects or symbols. Kinesthetic or tactile learners are typically difficult to engage in traditional classroom activities that are usually more visual or auditory in nature. They are able to reinforce learning through exercises involving touch, movement and space on an interactive whiteboard. Deaf and hearing-impaired learners rely primarily on visual learning, and the interactive whiteboard facilitates the presentation of visual material with the use of sign language simultaneously in



front of students. Visually impaired students with some vision ability can manipulate objects and use large text on an interactive whiteboard's big surface and participate in computer-based learning in ways that would not be possible on a smaller computer screen (Smarttech, 2006, p. 9).

Thus, the Smartboard can be used in all situations for learners of all types. This essentially removes all reasons to exclude this piece of equipment from any classroom situation, even for students with severe learning disabilities.

Teacher Reception of the Smartboard

Part of this case study determined how teachers perceive the Smartboard in the classroom. The study asked the teachers several pertinent questions related to their use, or lack thereof, of the Smartboard. The survey first determined if a teacher used a Smartboard in the class. If the answer to this question was affirmative, teachers were prompted to elaborate on how often they used the technology: once a week or less, multiple times a week but not every day, or daily. In addition, Smartboard users were also asked how the Smartboard was incorporated into the lesson, either as a secondary tool (i.e. for examples or multimedia only), or if the entire lesson was focused on material presented on the interactive whiteboard. The last two questions of the survey indicated if the teacher thinks the Smartboard is worth the investment, asking if the students are more engaged in a lesson with the Smartboard and if the Smartboard positively affects the students' performance on assessments. It is to be noted that all teachers who participated in the survey have access to a Smartboard in all rooms in which they hold class. Therefore, the choice to use and how to use the Smartboard is based solely on the teacher's personal preference.

According to the survey, the teachers with access to a Smartboard overwhelmingly choose to use the technology. The interactive whiteboard was found to be used in 91.7% of the classrooms, while 8.3% chose not to use the Smartboard for various reasons. In a similar survey of 206 teachers done by TUSD



Stats online after the 2006-2007 school year, similar results were found. "Of the teachers who initially received the Smartboard at the beginning of the year, only 7.3% reported that they 'never' use it" (TUSDstats, 2007, p. 1). This means that 92.7% of teachers polled with access to a Smartboard choose to use it. With the evidence gathered from the current survey and the TUSD survey, it appears that no matter how the Smartboard is used, teachers recognize that it has the potential to be a powerful educational tool.

Using the population of teachers that have chosen to use the Smartboard, the survey determined how often the technology was used. According to the results from this case study, 90.1% of these teachers used the Smartboard every day with the remaining 9.9% using the Smartboard more than once per week. No Smartboard using teachers were found to use the board once a week or less. The TUSD survey paints a slightly different picture, however. Of the teachers in the TUSD survey that use the Smartboard, 60.2% use the technology on a daily/everyday basis while 35.6% used the board more than once a week. This means that 4.2% of these teachers only used the Smartboard rarely, meaning once a week or less. While the numbers between the two surveys is a bit different, the general outcome is the same. The majority of teachers that use the Smartboard use it on an everyday basis, whereas there are very few teachers that use the board once a week or less. In addition, 100% of the teachers polled that use the Smartboard prepare lessons that are focused completely on the Smartboard. In other words, the teachers do not simply use it to show multimedia items or to illustrate an example. They are creating pre-prepared, full lessons on the Smartboard, ensuring the class' attention will be on the board at all times during the period.

The next question directly addressed the claim by SMART that their product positively effects student focus and engagement in the classroom. When asked if they thought the Smartboard improved student attentiveness in class, the teachers in this case study were split. About 58.3% of the teachers polled



thought that it improved student focus, while 41.7% decided that this was not the case. It should be noted that of the 41.7% that believed that student engagement was not improved did not think it was negatively impacted either. It was also mentioned by a teacher in this study that often student focus was improved, but there were some topics where student interest and, therefore, focus would be lacking. This focus issue is not as closely contended in the TUSD survey. On the subject of student engagement in class, 88.2% of TUSD surveyed teachers agreed that the Smartboard improved this aspect of their class. In addition, TUSD surveyed teachers on the overall effect of the Smartboard on student behavior in class. Only 56.6% agreed that this was the case, while 34.7% disagreed and 7.6% thought that the board caused more behavior problems.

Finally, the teacher's were asked if they thought their students were performing better on assessments due to the regular use of the Smartboard. The overwhelming majority of those surveyed were convinced that students' achievements were not enhanced due to the use of this technology. In fact, only 16.7% of the teachers believed that students' grades benefitted from Smartboard use. In some cases, the teacher believed that student achievement would improve based upon the nature of the student. The student who is motivated and on-task would benefit more than the unmotivated, distracted student in this case.

As mentioned previously, the teachers in this case study indicated their opinions on this matter for various reasons. Those reasons indicated from a series of pros and cons that need to be weighed when deciding whether or not to use the Smartboard in class or, for an administrator, if the purchase of a Smartboard is necessary and worth the investment.

Despite the overwhelming belief of this study's teachers that the Smartboard does not improve student performance on assessments, there were several positive attributes of the board that they mentioned. The teachers were quick to point out the visual enhancements that they could use in their lesson,



especially if the lesson was meaningful with specific concepts that could be emphasized through the tools found on the Smartboard. Often the tool used for this extra emphasis was the different colored "markers" used to write on the interactive whiteboard. This allows the teacher to point out important aspects of a problem they are explaining by putting the point in a different color, which is an easy task, thanks to the "marker" tray. In fact, since there are four colors available, the teacher has the ability to emphasize, or separate on the same screen, four items of interest. Another visual aspect that the math teachers were grateful for was the ease and visual clarity of graphs. In all curriculums of middle school and high school math, graphing plays a significant role, especially in New York State's Geometry curriculum which is geared for tenth grade, mainstream level students. In addition to this course and relatively basic graphing, this aspect of the Smartboard is a great tool for Calculus as it revolves around the interpretation of curves on a graph as they relate to rates of change (Russell, 2010). Since the Smartboard is connected to a computer, the teachers polled were also using the Smartboard to display scanned worksheets that students in the class had in front of them. With the worksheet on the Smartboard, the teacher was able to write onto the digital display to efficiently go over problems with students, since this method cut out the need to copy the problem onto a normal blackboard or whiteboard. Another mentioned pro for the Smartboard was the ability to use other programs. One especially useful program for these math teachers is a Texas Instruments software product, called the TI-Smartview, which displays the TI-84 calculator on the computer (Texas Instruments, 2010). The program allows students to see the sequence of buttons pushed to perform certain tasks on the calculator. By using this program in conjunction with the Smartboard, the teacher is able to use the displayed calculator as if it were a physical piece through touching the appropriate buttons on the interactive whiteboard. This partnering of products leads to the final pro, mentioned by the polled teachers. By being able to use the TI program in this way, the teacher does not have to sit in front of the computer to



operate the display. This allows the teacher to be more focused on the class. "With the Smartboard, you can control any application through the touch board. So instead of working from behind the computer keyboard, you can be at the front of the classroom physically interacting with the display" (Kuroneko, 2010, p. 1). This, however, is also listed as a negative, since the teacher or student interacting with the board must be in front of the class to use it (Langer, 2007).

The teachers polled also claimed that the Smartboard had some shortcomings as well. One of the big things mentioned was the lack of space to write on the Smartboard. Teachers are used to having large amounts of space, generally on a board spanning the length of the front of the classroom, as well as needing to write large enough so that the students can read and take notes from their writing. While the Smartboard has a much larger space to work with than a computer, the size of a teacher's writing makes the size of the screen almost unacceptable.

Teachers find they are constantly moving the scroll bar up and down for students who are trying to copy notes that have been moved off the screen. This tends to waste time and slow the pace of the class down. This reason alone has kept Teacher B in our case study from incorporating the technology into any lesson. Another big thing among those surveyed was the fact that the "markers" were large and cumbersome to use, causing the teacher to have poor handwriting on the board. As one teacher put it, "It feels like I'm drawing with a fat crayon." Handwriting on the board tends to look "large, blocky, and messy" (Kuroneko, 2010, p. 2). In addition, "when writing on the board, you body can cast a shadow on the screen right where you are writing" (Performance Pyramid, 2009, p. 1). This also makes it difficult to label points on a graph. With these points being made, the teachers said that as a result, the students have a difficult time copying down the notes that are displayed on the Smartboard. The teachers also contended that it was time consuming to prepare a lesson using the Smart Notebook software. While the lesson itself is focused on the important points the teacher wanted to make, creating a visual lesson



on the board takes a longer period of time than writing out the lesson by hand. While in many cases teachers do take the time to prepare these visual lessons for the Smartboard, another drawback is that the technology has the same issues as any other piece of technology, it can crash. If the computer for the Smartboard crashes, or if the lamp used to display the screen on the interactive whiteboard fails, the teacher is essentially at a loss, especially if the day's lesson was created on the Notebook software. With this being said, teachers still recognize the potential for the Smartboard.

Teachers stated that sometimes it is not what the Smartboard can do, but rather what the teacher knows how to do with the Smartboard that makes it effective. One teacher claimed that the Smartboard has the potential to be a "game changer" if used correctly, while another stated that the Smartboard is a great tool that should be used as an enhancement to the lesson but not necessarily the focus of the lesson itself. In other words, the teacher should still be teaching and not relying on the Smartboard to do the work.

Student Reception of the Smartboard

When looking at the overall impact of the Smartboard in the classroom, the students who are supposedly benefitting from its use cannot be overlooked. In this case study, the students have also chimed in with their views on how effective the Smartboard is in the classroom. The students polled are assigned to teachers who use the Smartboard for just about every lesson in every class. Since the Smartboard is relatively new to the students, they have also experienced classes where no Smartboards were available. Thus, they can make a clear comparison between classes that now use a Smartboard and classes where no Smartboard is used from their own experiences. In order to gauge the students' attitude towards the Smartboard and to find out how they feel the technology impacts their learning, the students were asked a series of four questions.



The students were first asked about their attitude towards the new inclusion of the Smartboard in class. The study aimed to find out if the students liked lessons that were done on the Smartboard as opposed to lessons without the Smartboard. Of the students polled, 70.8% of them said they enjoyed their classes more when the lesson was done on the Smartboard. With over a two thirds majority enjoying having the interactive whiteboard in the classroom, the attitude was there for a potential positive impact.

The next question follows in the footsteps of the survey given to the teachers. The teachers were asked about improved focus in a Smartboard using classroom where 58.3% of teachers agreed that it did help with student engagement. The student agreed about this fact even more than the teachers. About 70.8% of these students said that it is easier to pay attention to the lesson when it is done on the Smartboard. It is important to notice the correlation here between students who feel they are more focused and students who enjoy Smartboard lessons. In fact when the survey was taken, the students who voted in the affirmative for both of these categories were roughly the same people.

The survey then moved on to the content and understanding that students felt they were getting in the Smartboard centered classes. Students were asked if they felt that they understood the material better now that it was being presented on a Smartboard. The result of this question is interesting because with such a high rate of students believing they were more focused in class, only 24.7% of the students felt that they actually had a better understanding of the subject matter being presented to them. The students mentioned a number of reasons for this phenomenon that will be discussed shortly.

After reviewing the previous question, the result of the big question of whether or not students felt they were getting better grades with the Smartboard was almost predictive. A resounding 95.5% of the students felt that using the Smartboard in class did not improve their grades at all. Some students even went so far as to say that their grades had declined since the introduction to the Smartboard into class.



The negative results as to the student perceived impact of the Smartboard were backed up by the students in a series of cons, with few matching positive aspects. Students, echoing the feelings of the teachers, agreed that the Smartboard was a great visual tool. It was especially good for geometry classes where a lot of graphing was involved. The students said that in a math class, for this specific reason, the Smartboard excelled at making a positive impact. In addition, they enjoy going up to the board to use it to answer questions. This is backed up by their high affirmative vote for the improving of student engagement in the class. The interactivity level is now much higher in the Smartboard classrooms since the students like and respond positively to lessons that directly involve them in some way other than simply taking notes and doing problems. Another big plus among the students is the ability of a lesson, complete with notes, to be printed. The majority of the students polled are highly active within the school and, as a result, are pulled from class for various activities at a fairly common rate. Since lessons and actual teacher notes can be saved and printed, the students can participate in their activities while still keeping up with what is going on in their classes.

On the flipside of the coin, lie the students' complaints about the Smartboard. They too, find frustration in the fact that the Smartboard, with all its high-tech machinery, still crashes. They dislike having to sit in the classroom doing nothing while a teacher or technician spends valuable class time trying to fix a busted computer or a blown out lamp bulb that is putting the Smartboard out of service. While the students believe in time these problems will become rarer, since the Smartboard is still a relatively new piece of equipment, they are nevertheless downfalls. Another byproduct of this relative newness is that fact that very few teachers actually know how to use the Smartboard and still fewer that use the technology to its full potential. This complaint by the students directly affected the way that they voted in the survey on the subjects of better understanding the course material and overall improvement of grades. These low approval ratings say the students, are due to the fact that even though the



Smartboards are being used in the class, the full potential of the technology is not being realized and they are essentially getting the same lesson that they would be getting had the Smartboard not been present. The most interesting of the drawbacks presented by the students was the issue of the board itself being a distraction. SMART Technologies Inc. contends that students would be more focused in class with the use of this equipment. However, among the 29.2% of students that did not feel more focused with the Smartboard, the ability of the use of the technology to be distracting came into light. It seems that some of the students feel that the Smartboard is too much of a draw to other students in the class. This over enthusiasm by such students leads to wasted class time as the teacher has to explain to students that instructional time is not a time to be drawing pictures on the Smartboard and no, they cannot come up to the board to write on it right now.

It seems that since the Smartboard was only recently introduced into the classrooms in which the students are enrolled, the impact of the board is being severely limited or cancelled out completely. They recognized that the Smartboard has the potential to improve their classroom achievements in the future, but for now the teachers still have to go through the process of learning how to bring out the best from the capabilities presented to them. It was also noted and it was obvious which teachers had more training in using the Smartboard, as those classes were more interesting with a lot of new and interesting items in the lessons that were not evident in classes where the teachers had not yet learned how to use the same items. When informed of the teachers ongoing efforts to put to use more of these interactive tools, the students said that their understanding of the material would probably improve when the additional tools were implemented. In addition, the novelty of the Smartboard will also wear off, leading to less distraction from over enthusiastic students.

Background of the Teachers and Classes Studied



Due to the nature of this case study, two teachers were required in order to collect the appropriate data. The study compares a classroom that uses the Smartboard versus a classroom that does not use a Smartboard. While the reasons to use, or refrain from using, the Smartboard vary from teacher to teacher, the decision will be made. Since it is preposterous to ask a teacher to change their style for the sake of a ten week long study, two teachers were selected at random from those who volunteered to participate in the study. Henceforth, the teacher using the Smartboard will be known as Teacher B. These teachers were also selected due to their qualifications and the nature of their class schedule. In order to achieve the most accurate results through this method, it was imperative that the teachers involved be experienced, both in teaching and in teaching their current classes and teaching the same curriculum. Both Teacher A and Teacher B have over thirty years of experience each and have been teaching the exact same classes and at the same grade level for at least the past fifteen years. Thus both educators are master level teachers and are well versed in conveying the curriculum to the level of student that will be assessed in this case study.

With the adeptness and equality of the teachers verified, it was important to select classes that are on the same mathematical level.

Methods of data collection

To best assess the impact of the Smartboard in the math classroom, a good cross section of students must be taken. Thus, since Teacher A and Teacher B teach both mainstream and accelerated/honors level students, one class of each level were selected at random. This allowed for comparisons between classes where students were on the same level, mathematically. In addition, the impact of the Smartboard could be compared not only between the equal level classes but also between the mainstream and accelerated/honors level students to see which classes were more effected, if at all.



In order to assess the difference created by using a Smartboard, students in the selected classes were compared over the period of one marking term, a quarter of the school year. Since Teacher A and Teacher B maintain the same topic schedule from mainstream class to mainstream class and accelerated/honors class to accelerated/honors class, the identical tests were used on each level. This allows for a fair comparison between each ability level. The tests for each topic allow for the measurement of the impact of the Smartboard on the comprehension of recent material by the students. In addition, a cumulative test was given at the end of the quarter to assess retention of the material of the Smartboard class versus the non-Smartboard class.

As with all statistical analyses, there are some factors that contribute to a possible small error percentage. It must be acknowledged that certain factors in the classroom and from the students can lead to extraneous variable having an influence on the results. One such factor is the use of multiple teachers to do the case study. Every teacher has his/her own unique style of teaching. This means that every student will have a different experience learning the same piece of material from different teachers regardless of whether or not the Smartboard is used. In addition, the teacher and students together form their own classroom personality which may help or hinder the learning process. A classroom can have students that are willing to assist other students in their work and pay close attention to what the teacher is saying while another may have unruly, disruptive students that have an overall negative impact on education. However, these extraneous variable should be controlled by the random assignment of teachers and classrooms to the study.

Results of the Study

In all four classes, students were assessed on a basis of seven grades including three tests and four quizzes. The results were broken down in scope ranging from simple overall averages to how well each



class did on tests versus quizzes. All of these results were compared between the classes of equal mathematical skill as well as to measure the impact difference between the two levels.

We will begin by looking at the results in the mainstream level classes. In the classroom where the teacher declined to use the Smartboard, the overall average of students at the end of the quarter was 86.3%. When the Smartboard enters into the classroom, the change in scores is negligible at best. The Smartboard using classroom attained an overall class average of 86.1%, a difference of 0.2% between the two classes. A curious development in the overall average is shown when we break down the scores into the quiz and test aspects of the overall grade.

When the study looks at the test scores of the class without the Smartboard, the score is close to the overall average at 86.0% and, similarly, the quiz scores were at 86.8%. The class with the Smartboard had a bigger difference between the two scores. The test scores came in at an average of 83.5%, while the quiz scores were higher at 89.5%.

The accelerated classes have a slightly different set of characteristics when one observes the data. Teacher A's class, with the Smartboard, achieved an overall average of 88.4%. Teacher B's class managed to eclipse the score of their Smartboard using counterparts by scoring an overall mark of 92.0%. There is again another story to tell when the breakdown of the overall grade into test and quiz scores is done. In the class without the Smartboard, students were fairly steady with their scores, achieving 92.8% on tests and 90.2% on quizzes. In comparison, there is a large gap between the test and quiz scores in the Smartboard class. Students scored a lower score of 85.9% on tests while scoring a full letter grade higher on quizzes with a 93.4% average.

Comparison of Class Achievements



As seen from the results, the classes with the Smartboard and the classes without the Smartboard differ very little on the surface. However, a number of conclusions can be drawn from the comparison of these scores both on the surface and in depth.

In the mainstream level courses, the two classes attained incredibly close overall averages. The 86.3% for the non-Smartboard class and 86.1% in the Smartboard class yields a difference of only 0.2%. With this small difference, it can be concluded that in the mainstream level classes, overall scores are the same. Therefore, the Smartboard has no impact for math classes at this mainstream level. In fact the non-Smartboard class, again by the slimmest of margins, outperformed their Smartboard using counterparts. However, when we break down these overall scores, as mentioned earlier, a bigger difference between the natures of these classes comes to light.

When the overall scores are broken down into tests and quizzes, the class without the Smartboard made consistent scores across the board, while there is a half of a letter grade difference between the two categories in the Smartboard class. In the two classes, both Teacher A and Teacher B use quizzes to assess students over a short period of time. These quizzes tell the teacher how well students have learned the information. The scores between the two classes indicate an 89.5% to 86.3% difference in favor of the Smartboard students. While the difference is relatively small, the Smartboard seems to have an immediate impact on student learning over a short period of time. However, the test scores between the two classes is small, but coupled with the quiz scores, there is a big difference in how these two classes are learning. Since tests come at the end of a unit, they not only assess a student's knowledge of the topic, but also the retention of information over a longer period of time. With these scores, it has been shown



that the mainstream class without the Smartboard can retain information better than the class with the Smartboard.

The accelerated/honors level students in the study tell a slightly different story than their mainstream classmates. The overall averages between the two classes were a half of a letter grade apart, the difference between a B+ and an A-. Students in the Teacher B's class outscored those in Teacher A's class by a 92.0% to 88.4% margin. With these averages, it seems that, in these classes, the Smartboard has a negative impact on overall learning. The discrepancy in test and quiz scores from the mainstream classes is even more apparent in the accelerated/honors level classes. Once again, however, the non-Smartboard students were fairly consistent with their marks, scoring 90.2% on quizzes and 92.8% on tests. In Teacher A's class, the difference in quiz and test scores is about a full letter grade with students at 93.4% on quizzes and 85.9% on tests, a very low grade for this level of student since they must maintain an 85 or higher to remain in the class. However, once again the students with the Smartboard show that the impact of the Smartboard in the short run is a positive one. Also, similarly to the mainstream classes, the non-Smartboard classes tend to retain the information better than students using the Smartboard.

To try to determine if one level benefits more from the Smartboard, the case study also allows for a comparison between both of Teacher A's classes. Overall, the accelerated/honors level students outscored the mainstream level students 88.4% to 86.1%. However, since the competency levels are so different, no real conclusion can be drawn from this statistic. The real test of the impact difference between the two classes is in the gap between immediate understanding and retention of information over time. With these grades, the difference in these two categories for the accelerated/honors class was at 7.6%, while the mainstream students were a little more stable at 5.9%. Essentially, the students



in the mainstream class, once they learn a topic, are retaining the information slightly better than their accelerated/honors counterparts.

The assessment of the Smartboard's impact in the classroom seems to vary from category to category. Over a short period of time, using the Smartboard has a positive effect on student learning as these students scored higher on their short-term quizzes. However, when given a test, weighing more heavily on their overall quarterly averages, the retention in the Smartboard classes could not keep up with their counterparts in Teacher B's class. Overall, the quarter grades for these classes lead one to believe that using the Smartboard in class is not a necessity for good student achievement. In fact, for accelerated/honors students, it appears to be a hindrance.

Comparison of this Study with Similar Studies

The topic of the impact of Smartboards is a popular one, as classrooms around the world are now incorporating this piece of technology as a primary tool in educating students. As such, there have been other case studies similar to this one to determine if the Smartboards are improving student achievement. The results in this case study contend that, at least in the area of math, the Smartboard tends to have no overall impact on education. However, other studies exist that both corroborate and disagree with this statement.

The SMART Technologies study, done in 2006, was done in the United States, the United Kingdom and Australia. This research and compilations of other authors' and teachers' experiences have lead the company to conclude that their product is, in fact, providing a positive impact on the learning process. While the research done by the SMART Technologies company indicate a trend towards the positive, many people tend to raise an eyebrow at these results since the study was done by the product's makers. However, there are at least three other studies that agree, at least in some degree, with Smart's contention. These studies were done by a series of teams including a large team creating *A*



Review of Studies of ICT Impact on Schools in Europe, a report to the Department for Children, Schools and Families. The team of Glover, Miller and Averis, is a critical one, and whose 2003 study is often referenced in other Smartboard studies.

The review of ICT (Interactive and Communications Technologies), which involves interactive whiteboards, postulates a number of things. To begin with, the students they observed initially started showing signs of progressing in their studies. With the continued study, the authors noted some very important facts that occur in each of these case studies. In their recommendations, they noted that they must "implement new forms of continuous professional development in a workplace environment" (Balanskat et al., 2006, p. 62), especially as a result of the continually changing technological landscape. This was one of the key pieces of their study to ensure that the students using ICT could continue to excel in ways that classes without ICT were not. The key observation in this study for the aforementioned recommendation was that "the greatest impact is found in relation to teachers who are experienced users" (Balanskat et al., 2006, p. 58). This agrees with the findings of the current case study, most notably the students' responses, which states that the impact of the Smartboard was being held in check due to the lack of knowledge of their teachers in how to use the technology in the most effective manner.

The team creating the report to the Department for Children, Schools and Families, was able to break down progress into the different subject areas. While they did not elaborate much on the topic of mathematics, they did state that "interactive whiteboards appear to have a positive impact in math attainment" (Somekh et al., 2007, p. 4). These authors found, overall, that their study provides considerable evidence of the value of interactive whiteboards in terms of increased pupil motivation and teachers' job satisfaction. There is also evidence of a positive impact on attainment when pupils have been taught with an interactive whiteboard for at least two years. (Somekh et al., 2007, p. 10)



In addition, as in the previous study, these authors recommend a continuing array of professional development in this area in order to increase teacher knowledge of how to use the technology to further progress in student education.

The team of Glover et al. used the interactive whiteboards in a program they call Cognitive Acceleration in Mathematics Education, or CAME. Their study revolved around the engagement of students during a series of mathematics lessons. They measured, based upon time, how often students were showing interest in the lesson. This project did not measure the impact of the interactive whiteboard exclusively, but rather existed to determine the potential of this technology. This team also found that students were more engaged and, therefore, more likely to succeed and understand the material, which they did in each session, when the interactive whiteboard was used (Averis et al., 2003). In addition, and in complete agreement with the other studies, they stated "results suggest that lesson effectiveness hinges on the technological capability of the teacher" (Averis et al., 2003, p. 1).

Conclusion – Is the Smartboard Beneficial to a Math Class?

The results in this case study would suggest that the Smartboard has little to no effect in the math classroom. However, the teachers' remarks on the Smartboard show that there are some definite positive aspects of having this technology in the classroom. These pro Smartboard statements from the teachers, along with the statement from the students that teachers need to learn how to use the Smartboard more effectively, suggest that the full potential of the interactive whiteboard in the tested classes has not yet been realized. With further professional development for the teachers exclusively on the Smartboard, the impact of the technology in the math classroom will be noticeably positive. With that being stated, in order to justify the high cost of each Smartboard, teachers must be able to work the tools to their full extent. For this reason, it must be determined how much knowledge a teacher must have in order to use the Smartboard for a measurable positive effect in the classroom.



Implications for the future

It can be noted that this was a rather limited study involving limited numbers of students and teachers as well as only one subject. What needs to be considered in further research is whether or not Smartboards can have a positive impact in other types of classrooms, such as the college classroom and graduate school and in other subjects. It is suggested that further research in all areas and all types of classrooms be conducted and studies need to be accomplished with teachers having different levels of training and experience with Smartboards.

References

- Averis, D., Glover, D., & Miller, D. (2003 September). The Impact of Interactive Whitebaords on
Classroom Practice: Examples Drawn from the Teaching of Mathematics in Secondary Schools in
England. Retrieved May 2, 2010 from website:
http://math.unipa.it/~grim/21_project/21_brno03_Miller-Averis.pdf
- Balanskat, A., Blamire, R., & Kefala, S. (2006, December 11). The ICT Impact Report: A Review of Studies of ICT Impact on Schools in Europe. Retrieved May 1, 2010 from website: <u>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.110.9338&rep=rep1&type=pdf</u>.
- Bird, K., Cummings, J., Downing, B., Haldane, M., Jarvis, J., Jones, K., Lewin, C., Mavers, D., Scrimshaw, P.,
 Sing, S., Somekh, B., Steadman, S., Stuart, H., & Woodrow, D. (2007 October). Evaluation of the
 Primary Schools Whiteboard Expansion Project summary report. Retrieved May 2, 2010 from
 website: <u>http://www.becta.org.uk</u>
- Herman, S. (2009, October 6). SMART Board Interactive Whiteboards in the Elementary Classroom. Retrieved April 30, 2010 from website: http://cnx.org/content/m32328/latest/Interactive Geometry Glossary for New York State High Schools. (2009). Retrieved May 1, 2010 from



website:http://www.gogeometry.com/glossary_terms/ny_sed_geometry_glossary_curriculum.h

- Kuroneko, K. (2010). SMART Board Pros and Cons of Using a Digital, Interactive Whiteboard (In the Classroom). Retrieved May 1, 2010 from website: <u>http://ezinearticles.com/?SMART-Board----</u> <u>Pros-and-Cons-of-Using-a-Digital,-Interactive-Whiteboard-(In-the-Classroom)&id=1399407</u>
- Lake Havasu SD. (2010). My Board is Smarter Than Your Board. Retrieved April 30, 2010 from website: <u>http://www.havasu.k12.az.us/archive/smartboard.html</u>
- Langer, E. (2007, June 3). SmartBoard Options. Retrieved May 2, 2010 from website: http://edtechexp.blogspot.com/2007/06/smartboard-options.html
- Levy, A. (2009). NYC Helpline: How To: Incorporate Technology in the Classroom. Retrieved April 30, 2010 from website: <u>http://www.teachersnetwork.org/NTNY/nychelp/technology/smartbrd.htm</u>
- McNeese, M. N. (2003). Acquisition and Integration of SMART Board Interactive Whiteboard Skills: Gender Differences Among College Faculty, Staff and Graduate Assistants. Retrieved March 23, 2004 from website:www.smarterkids.org/research/pdf/McNeese.pdf
- Pros and Cons on SMARTboard Technology. (2009). Retrieved May 1, 2010 from website: <u>http://performancepyramid.muohio.edu:8081/SMARTboards/Pros-and-Cons.html</u>
- Russell, D. (2010). Calculus Definition. Retrieved May 2, 2010 from website: <u>http://math.about.com/cs/calculus/g/calculusdef.htm</u>
- Smart Technologies Inc. (2006, March). Orienting the SMART Board Interactive Whiteboard. Retrieved May 2, 2010, from website:

http://downloads01.smarttech.com/media/services/quickreferences/pdf/english/orient.pdf

Smart Technologies Inc. (2006, March). Interactive Whiteboards and Learning: Improving student learning outcomes and streamlining lesson planning. Retrieved April 30, 2010 from website:



http://www2.smarttech.com/NR/rdonlyres/2C729F6E-0A8D-42B8-9B32-

F90BE0A746D8/0/Int_Whiteboard_Research_Whitepaper_Update.pdf

SmartBoard Tips and Techniques. (2004). Retrieved May 2, 2010 from website: <u>http://www.rockingham.k12.va.us/howto/smartboard/tips.htm</u>

Wetzel, D. R. (2009, May 6). 6 Strategies for Using a Smart Board in Class. Retrieved May 2, 2010 from website:

http://teachingtechnology.suite101.com/article.cfm/6_strategies_for_using_a_smart_board.

Texas Instruments. (2010). TI-SmartView Emulator Software for the TI-84 Plus Family. Retrieved May 1, 2010 from website:

http://education.ti.com/educationportal/sites/US/productDetail/us_smartview.html

- Towlson, M. (2003). Using a SMART Board with 7 Maths. Retrieved March 23, 2004 from website: <u>http://client.canterbury.ac.uk/research/smart/sandwich-tech/sandwich-tech.asp</u>
- TUSDStats. (2007). TUSD Smartboard Package Survey. Retrieved April 30, 2010 from website: <u>http://ezinearticles.com/?SMART-Board---Pros-and-Cons-of-Using-a-Digital,-Interactive-</u> whiteboard-(In-the-Classroom)&id=1399407

Using Electronic Whiteboards in Your Classroom: Benefits. (2002, September). Retrieved April 30, 2010 from website: http://www.waukeshaschools.com/WIT/SmartBoard/benefits.htm

Using a Smart Board to Enhance Teaching and Learning. (2004). Retrieved May 1, 2010 from website: http://elep.cite.hku.hk/CaseStories/en/CPS/04_Ach.asp?school=CPS&cata=IV



SCOTTSDALE COMMUNITY COLLEGE PROVIDES THEIR STUDENTS OPEN ACCESS WITH END-TO-END VIRTUALIZATION

Angel Rodriguez University of Florida Gainesville, FL 32611 <u>angelrod@ufl.edu</u>

Kelly Essary University of Florida Gainesville, FL 32611 <u>kessary@ufl.edu</u>

Abstract

Due to shrinking budgets and new demands for technology, the IT department at Scottsdale Community College (SCC) needed a cost effective solution that would provided access to students, faculty and staff, both on and off-campus. Dr. Jan Gehler, SCC President, and Dustin Fennell, SCC CIO, implemented a virtualized computing environment, which met all of these requirements and provided additional advantages to the institution.

Keywords: Virtualization, Higher education, Technology refresh

Introduction

Scottsdale Community College (SCC), located in Scottsdale, Arizona, is one of the ten community colleges that make up the Maricopa County Community College District. Due to shrinking budgets and new demands for technology, the IT department needed a cost effective solution to provide access to students, faculty and staff, both on and off-campus. This case study will document how Dr. Jan Gehler, SCC President, and Dustin Fennell, SCC CIO, implemented a virtualized computing environment, which met all of these requirements and provided additional advantages to the institution.

Many community colleges across the nation have seen as much as a 75 percent increase in enrollment compared with previous years; however, the current recession is causing major cuts in state and local budgets (Stewart, 2009). Institutions of higher education typically have a two year refresh cycle, wherein



old technologies are replaced. A plan such as this evaluates the maximum time between replacements of computer-related equipment (Diamond, 2002). Even with annual funding allocated for educational technologies, it is usually a competitive process with more requests than available funds (Brown, 2007). Along with shrinking budgets, roughly 10 percent of the overall technology budget should be allotted to maintenance and support services (Brown, 2010).

SCC has a mandate to provide pervasive technology services, particularly to low-income residents and non-traditional students. SCC recognized the need to find a non traditional approach to technology. Throughout implementation, the institution was transparent about their objectives. As part of SCC's master plan, and to accommodate the needs of students, CIO Dustin Fennell utilized desktop virtualization when it was time to replace the college's computers. Desktop virtualization, or client virtualization as it is also known, is a process that separates a personal computer desktop environment from a physical machine using a client–server model of computing. When users work from their remote desktop client, all of the programs, applications, processes, and data used are kept and run centrally on the "virtual" computer. This allows users to access their desktops over the Internet or a network on any capable device.

In order to provide up-to-date educational content, the IT team had to upgrade not only the computers, but the software. Spending on new hardware left little budget to acquire advanced technology or purchase new educational software (Fennell, personal communication, June 4th, 2010). SCC also needed a way to strengthen its market advantage in an area with fierce competition from other colleges and universities.

Today, students come to the college with many types of personal devices, including laptops and personal digital assistants, or they connect from home to the institution's network, using a variety of personal desktop computers. Colleges are being confronted with two new types of students: younger



and more technologically driven, and older and more career driven (Fullan & Scott, 2009). Though technically savvy, students were struggling to afford software required for courses, or a particular type of computer needed to run that software, or to come to campus to use one of the college PCs. Moreover, the computer situation hampered the institution's efforts to expand enrollment with working adults and students who wanted to take online courses (Fennell, personal communication, June 4th, 2010).

Access was very important for faculty members as well as students. Dr. Gehler stated that after surveying the faculty, the institution discovered most faculty felt that "work is what I do, not where I am". The project was given the slogan "anytime, any place, any device" and was just as beneficial to faculty as to students.

Fennell decided to implement a Web portal, using the Citrix Delivery Center. Working with a Platinum Citrix Solution Advisor, the MySCC portal solution was implemented in two phases. First, Citrix XenApp, Platinum Edition was rolled out for virtualized delivery of many different applications, including the Microsoft Office Suite, specialized math tutoring programs, Microsoft Visual Studio and Adobe Creative Suite.

Second, SCC implemented Citrix XenDesktop, Advanced Edition to deliver two Windows XP virtual desktops: one that featured AutoCAD, AutoDesk Revit and Google SketchUP software delivered to interior design and AutoCAD program students; the other which delivered Adobe Creative Suite to Business Institute students and staff who needed it (www.citrix.com). Today, MySCC supports MacOS, iPod, and iPod touch. Virtualization allows for platform-independence (Bleicher, 2007; Hutt, Stuart, Suchy, & Westbrook, 2009; Seay, & Tucker, 2010). Once logged onto the virtual desktops, the user will have access to mapped drives, personal files and network resources.



Having a centralized and virtualized desktop environment has enabled SCC's IT department to effectively patch and update virtual desktops in minutes. Additionally, XenDesktop is expected to significantly reduce security/compliance risks and overall management time. This virtual desktop will also provide a uniform appearance to all students and teachers for ease of instruction.

Results

The entire process took just six months: from vision to implementation. SCC has since been contacted by dozens of institutions of higher education across the nation wanting to implement a similar program. Moreover, SCC is implementing the virtualization program across three other College Districts. With MySCC, students no longer have to purchase software licenses (Burd, Seazzu, & Conway, 2009) or a specific brand or model of computer for coursework because the latest software is made available to them via the portal: either at the college or from home.

CIO Fennell considered the needs of the institution during the implementation of the virtualization program by aligning the design with the organization's goals. Key to the implementation were the task vision and the buying of the vision by students, faculty and staff. According to Fennell, "you have to become an enabler of change" (Fennell, personal communication, June 4th, 2010).

An increase in student diversity and the need to increase market share were additional motivators to the implementation. Using virtualization, all students in a course use the same resources (Burd, Seazzu, & Conway, 2009), ensuring a consistent learning environment. Moreover, faculty can upload assignments to the network for all students to access (Burd, Seazzu, & Conway, 2009). Not only can students connect to the institution, they can use the network to communicate with faculty.

Web-based access is having a positive impact on education, particularly to low-income students who previously had many challenges in pursuing a college degree (Seay, & Tucker, 2010). With the implementation of this program, there is no need for students to make additional investments in



software or hardware. On-campus computers have all of the software needed to access MySCC. Off campus students must use the Citrix "client" software. North Carolina State University has implemented a similar virtual computing lab using open source tools (Seay, & Tucker, 2010).

To finance the process, SCC used \$600,000 in capital funds from the computer program refresh. By redirecting money, the institution was able to provide a high-speed, highly available system, offering access to the latest technology and resulting in a savings of \$300,000 per year. The virtualization has simplified administration, enhanced data security (Kroeker, 2009) and kept staff needs to a minimum. In the past, the IT department had to maintain three different versions of AutoCAD. Delivering AutoCAD over XenDesktop requires only one version.

The use of XenServers reduced energy cost upwards of 85% (Creeger, 2008; Kroeker, 2009; Seay, & Tucker, 2010). The centralized management of the servers also allows the college to use existing IT staff to support other strategic needs. According to Fennell, to be successful, the methodologies must be standardized and tested before the roll over, so the virtualization works perfectly. He suggests institutions partner with integrators and that they never forget to focus on the end user, letting the end user drive the decision and implementation. In this case, by doing the work and learning from the Citrix integrators, the IT staff continued to develop knowledge and skills during the implementation of the new system. In the process, SCC helped other institutions of higher education implement their own virtual systems.

Virtualization also has its thorny issues, particularly licensing. It is important to resolve the licensing issue before the virtual computer system is implemented. License review is a prudent and highly recommended component of implementing a virtualization solution (Bleicher, 2007; Hutt, et al., 2009).

Conclusion



Using virtualization, SCC can tap into the growing market of non-traditional students who provide the greatest potential for increasing the college's enrollment. Virtualization is enabling SCC to fulfill its mission, providing access to students, faculty and staff, regardless of their location; improving technology; and achieving a competitive advantage without increasing the budget. All students, whether traditional on-campus or online, can use the same applications and network resources, any time, any place, any device.

References Available Upon Request



A PIPELINE PROBLEM IN HIGHER EDUCATION: REALITY OR "COP OUT?"

Beheruz N. Sethna The University of West Georgia Carrollton, Georgia 30118 <u>BSethna@WestGA.edu</u>

Abstract

This paper uses national data from the American Council on Education (ACE) to study the progress of different ethnic groups through the academic pipeline – stages studied include the bachelors, masters, doctoral, levels, and then progress to the Assistant, Associate, and (full) Professor stages, to full-time administrators and finally to the President stage. Since institutional heads are sometimes called Chancellor, this is referred to in the paper as the CEO stage. Critics of the Higher Education system might claim that the relatively low percentages of minorities in Higher Education represent a failure of our system to provide sufficient minority graduates. However, an opposing point of view states that these low percentages and numbers are simply a reflection of the "pipeline problem." In other words, since there are low numbers (or percentages) of minorities coming through the system – at each stage, if the "Input" is small, then, even the best processes of creating good products, are doomed to turn out, at best, low quantities of "Output." The results show that the answer to this question is not a monolithic "Yes" or "No," but that there is considerable variation for the various ethnic groups at different stages of the academic pipeline. Different ethnic groups need support and assistance to succeed at different stages of the academic pipeline. These imbalances can be corrected only with a substantial commitment of energy and resources from the entire higher education community. Such, then, is the recommendation - that all of these players and partners commit themselves to helping all groups - the majority and each minority population achieve success at all stages of the higher education pipeline.

Keywords: Minorities, Academic pipeline, Progress or success at each stage



Introduction

Higher Education critics sometimes claim that the relatively low percentages of minorities in Higher Education represent a failure of our system to provide sufficient minority graduates, sufficient numbers of minority participants in the economic progress that results from the holding of degrees, and the relative dearth of minority role models for our young minorities.

However, an opposing point of view states that these low percentages and numbers are simply a reflection of the "pipeline problem." "The Pipeline Problem" in this context is defined as the defense that there are low numbers (or percentages) of minorities coming through the system – at each stage, if the "Input" is small, then, even the best processes of creating good products, are doomed to turn out, at best, low quantities of "Output." In effect, if we look at this as a "production process" (for the creation of bachelors degrees, or any other stage of higher education), it would look like this: INPUT \rightarrow PRODUCTION PROCESS \rightarrow OUTPUT

If the input is very low, then the best of efficiencies in the production process will turn out low numbers of output. Though one might more reasonably call it an Input Problem, this is what is commonly referred to as the Pipeline Problem – and it will be so labeled in this paper.

This paper examines if the process is turning out output for minorities at least the same rate as it does for the majority. We accept that in many cases, it should work better than it does for the majority, to compensate for low input. However, if it does at least as well, there may a reasonable case to be made that the problem of low minority output is more a result of low input (the pipeline problem) rather than a flawed production process.

Literature Review

There is a considerable dearth of literature on this topic, with one notable exception: The American Council on Education (ACE) periodically releases reports entitled Annual Status Report on Minorities in



Higher Education. A good summary of 20 years of such reports is provided in *20 Years of Minorities in Higher Education and the ACE Annual Status Report,* published in July of 1994. The other references to the topic are found, in the main, in media reports, campus publications, and Web publications. The 5page limitation on this paper are too restrictive to examine the literature thoroughly. The entire 25page paper may be requested from the author for a more complete treatment.

Methodology and Analysis

As referenced in the preceding section, the analysis in this paper uses American Council of Education (ACE) data from their 2005 publication, *The Twenty-first Annual Status Report on Minorities in Higher Education*, 2003-2004.

To address the question about whether the low numbers of minorities in the pipeline fully explain the low output, this analysis examines flows through the pipeline, or "conversion rates."

Let us just pick one stage of the pipeline for illustration: Conversion of Bachelors degree holders to Masters degree holders. A complaint is that there are insufficient numbers of minorities with Masters degrees. This is true, but where does the problem lie? Is the main source of the problem the dearth of supply of minority Bachelor's degree holders, or the inefficiency of the Bachelors to Masters pipeline? Obviously, this is not a trivial problem – we need to identify the major source of the problem so that we may attempt to address it. Otherwise, we are distracting ourselves and our resources from the major issue.

If Masters degree programs are doing a good job in graduating those students that enter, then the problem is indeed that of adequate supply of Bachelors degree holders. If Masters degree programs are doing a poor job in graduating those students that enter, then the problem is that, in addition to inadequate supply of Bachelors degree holders, Masters degree programs need to improve their performance and their conversion rates.



The next question is: how do we define doing a "good job" or a "poor job" in moving minorities ahead in the pipeline (or converting them to the next stage), not just for Masters programs but for any stage in the pipeline: Bachelors to Masters, Masters to Doctorates, Doctorates to Assistant Professors, Assistant Professors to Associate, Associate to Full, senior Faculty to administrators, and administrators to Presidents? Clearly, there is no absolute measure (less than 100 percent) that universally defines "success" in this regard. So, as a surrogate measure of success in moving minorities ahead in the pipeline (or conversion to the next stage), this analysis uses conversion rates of the majority (Whites) as the benchmark. If, at any stage of the pipeline, we are moving minorities to the next stage at least at the same rate as that for the majority, then we will know that (while that conversion rate may or may not be a great one), at least that section of the pipeline is not exacerbating the problem.

At any stage of the pipeline, are we at least creating output of minorities at the same rate (relative to input) as we do for the majority? If, for 100 majority members in the input stream, X of them successfully "graduate" to the next higher level, and for every 100 minorities in the input stream, Y minorities successfully "graduate" to the next higher level, how does Y compare with X? How does the "conversion rate" for minorities (an output of Y per 100 in the input stream) compare with that for the majority (an output of X per 100 in the input stream)?

If Y is greater than X, then the shortage of minorities at the next higher stage is probably – in large part – due to a shortage of minorities in the pipeline (or at the previous stage). It would imply that we are doing at least as good a job as we do for the majority in moving people successfully through the pipeline. That would not make the shortage disappear (because of low input numbers), nor would it imply that we are doing the best job we can, but at least we would know that the process of conversion for minorities is working as well as it is for the majority.



However, if Y is less than X, then we have a more serious problem. It would not be appropriate to ascribe "blame" for the shortage of minorities at any stage of the academic pipeline solely on the shortage of minorities in the pipeline. Rather, we would need more and better support systems to move them to the next higher stage at a higher rate, so that we do at least as well for minorities as we do for the majority.

So, how *does* the "conversion rate" for Minorities (Y per 100 in the input stream) compare with that for the majority (X per 100 in the input stream)? One of the most significant (though not unexpected) findings shows that the answer is *different for each stage* of the higher education pipeline, and is *different for each minority* considered. While we (higher education) may be doing relatively well for Minority Group A at one stage of the pipeline, we may not be doing well for Minority Group B at that stage of the pipeline, nor may we may be doing well for Minority Group A at another stage of the pipeline.

The following computations were done for each ethnic group provided in ACE tables -- White (non-Hispanic), African American, Hispanic, Asian American, and American Indian:

(1) The output of each stage of the pipeline is divided by the output of the previous stage of the pipeline (as a surrogate input measure) to obtain a "conversion ratio." Since we are restricted to using those years provided in the ACE tables, we chose the closest approximation to the appropriate years to be used. (2) Then, we compute a comparison ratio: the conversion rate for each minority relative to that for the majority For convenience of representation, the conversion rate for the majority is represented as the baseline, and so a positive percentage rate for a minority group implies that the progress of that minority through the pipeline is that better than that of the majority, and a negative percentage rate for a minority group implies that worse than that of the majority. (3) Finally, these results are shown graphically in on the following page.



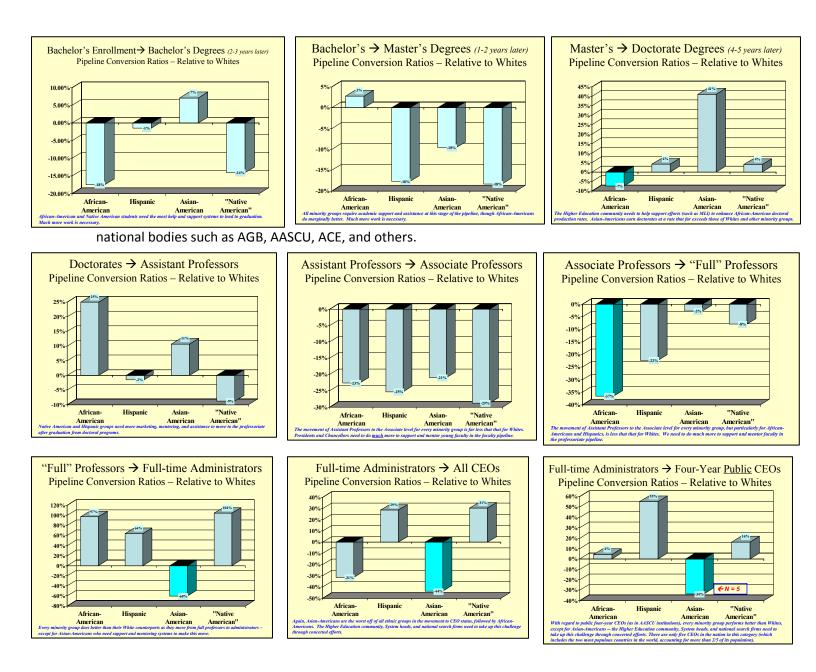
Results and Conclusions

The graphs show that different ethnic groups need support and assistance to succeed at different stages of the academic pipeline: ranging from African Americans at the earlier stages to Asian Americans at the later stages. These imbalances can be corrected only with a substantial commitment of energy and resources from the entire higher education community – to include national organizations such as AASCU and ACE, Governing Boards and AGB, System heads, national search firms, and higher education partners. Such, then, is the recommendation – that all of these players and partners commit themselves to helping all groups – the majority and each minority population achieve success at all stages of the higher education pipeline.

Graphs Showing Results



The bright blue bars represent any case in which any minority group's advancement through any stage of the pipeline is not only lower than that of the majority, but at least 10 percent lower than that of *all* the other minority groups. They point out the most pressing need for intervention and assistance from





TWO DECADES OF GREAT IDEAS IN LEADERSHIP IN THE 20TH CENTURY

Arthur D. Stumpf Leadership and Foundations Mississippi State University Mississippi State, MS 39762 ads124@colled.msstate.edu

Abstract

This paper considers written works of prominent authors in the decades of the 1950s and 1960s related to the study of leadership, noting corroboration of ideas, especially those of Carl Rogers, Abraham Maslow, and Douglas McGregor in the 1950s. Models of leadership in the 1960s critiqued by later authors are noted, also, particularly the Likert model and the Managerial Grid. The article concludes by making note of institutions of higher education which offer leadership studies *per se* at the doctoral level, and exhorts such institutions to expand their programs to schools or colleges of leadership studies in order to provide more readily a waiting global audience the opportunity to study leadership at advanced levels of higher education.

Keywords: Leadership, Higher education

Leadership Studies 20th Century

There's no doubt that the power of great ideas can change the world. It's certainly true that great thinkers in the decades of the 1950s and 1960s gave us outstanding contributions to the study of leadership, and society is different today than it was sixty years ago due to their legacy. Alan Kors (1998) makes the point that

"... If a culture changes the way it thinks about truth, nature, the knowable, the possible and impossible, and the causes of things, it will alter its expectations and behavior in almost all areas of human life... If a culture changes the way it thinks about using mind properly, it changes the way it thinks about almost everything." (p.6)



Carl Rogers and F. J. Roethlisberger addressed the need for improved communication in leadership in their article, "Barriers and Gateways to Communication" (Rogers and Roethlisberger, 1952). Rogers said, "... the tendency to make evaluations is common in almost all interchange of language... the stronger our feelings, the more likely it is there will be no mutual element in the communication" (Rogers and Roethlisberger, 1952, p. 29). The tendency to evaluate can be overcome, said Rogers, by the gateway, "Listening with Understanding," which requires courage because you run the risk of being changed yourself when you listen with understanding. Roethlisberger raised the question of how communication is possible at all when people do not see and assume the same things and share the same values. On the other hand, communication is facilitated when there is willingness to express and accept differences. In their article, "Listening to People," Ralph Nichols and Leonard Stevens (1957) corroborated the ideas of Rogers and Roethlisberger. They were concerned with the lack of unused potential in people to understand and remember what they hear: "The busy executive spends 80% of his time listening to people and still doesn't hear half of what was said" (Nichols and Stevens, 1957, p. 85). Their article is

instructive in ways to improve listening, and concludes with fourteen suggestions for building awareness of listening.

The nature of the human condition was of great interest in the 1950s in relation to leadership. Abraham Maslow published his memorable book, *Motivation and Personality* (Maslow, 1954), in which he presented his theory of human motivation, or his famous hierarchy of needs. Explicating his theory on his notion of prepotency of need, Maslow believed that the highest level of need is self-actualization, i.e., becoming all you can be, which depends upon first fulfilling one's self-esteem need, one's social need, one's safety and security need, and one's physiological needs, in that order. Carl Rogers corroborated Maslow's theory in his article, "A Note on the Nature of Man" (Rogers, 1957), in which he asserted that man is trustworthy, tends toward development and cooperative relationships, whose total



character tends to preserve and enhance his species. Rogers said, "...when a Freudian...tells me... that he perceives man as 'innately evil,' or more precisely, as 'innately destructive,' I can only shake my head in wonderment" (Rogers, 1957, p. 5).

In 1957, the same year as Rogers' article on the nature of man, Douglas McGregor addressed the assembled faculty of the School of Industrial Management at the Massachusetts Institute of Technology (MIT), asserting

"...We know that past conceptions of the nature of man are inadequate and in many ways incorrect. We are becoming quite certain that, under proper conditions, unimagined resources of creative human energy could become available within the organizational setting." (Bennis and Schein, 1966, p. 4)

In this address to the faculty of MIT McGregor went on to present his now famous Theory X-Theory Y which he undergirded with assumptions based on Maslow's hierarchy of needs. Ultimately, McGregor's prediction became a self-fulfilling prophecy which brought about a sea change in the way that human resources became managed and led in organizations in Western society, a fact readily observed today in the management of business, industry, health care, government, the military, and education.

The decade of the 1960s opened with the publication of *New Patterns of Management* by Rensis Likert (1961), a book which received much critical acclaim and several management awards. Likert improvised a scale to measure whether an organization fell into one of four systems: exploitative authoritative, benevolent authoritative, consultative, or participative group. In a later book by Likert (1967) the names of these four systems were dropped and labeled System 1 through System 4, respectively. On the basis of applications of his theory by subsequent authors, Likert's model appears to have had a long life, although questions were raised about the validity of some of his ideas. For example, Charles Perrow (1986) gave several reasons why some of Likert's claims for his System 4 (participative group) were



theoretically biased and methodologically unsound. Perrow was further critical of of Likert's model because it was a model advocating one best way, and management theory was moving to a position that there was no single best way to do things. This latter criticism was leveled at Blake and Mouton's (1964) *The Managerial Grid*, although their theory has continued to have a long life.

The same year that Likert's book was published *Harvard Business Review* published the article, "Understanding Leadership," by W. C. H. Prentice, in which prentice discussed problems and illusions in leadership, relations with people, and setting goals in leadership development. His artful conclusion was that the executive must be like an orchestra conductor. The conductor must have musicians with requisite skills, and he must set up ground rules, signals, and tastes that do not interfere with the musical purpose. The musicians must share satisfaction with their leader in the production of music having a certain quality, with the conviction that they are making music that could only be made under such a leader.

In the article, "One more Time: How Do You Motivate Employees?" by Frederick Herzberg (1968), the author showed how employees are more motivated by work itself than they are by external incentives, such as less time spent at work, spiraling wages, fringe benefits, and so on. Herzberg explained that external incentives are hygiene factors, not motivators. While hygiene factors may lessen job dissatisfaction, they do not give job satisfaction; hence, they do not motivate employees. On the other hand, job enrichment, such as more meaningful and challenging work, along with recognition for their work, does motivate employees. Herzberg's findings seem to be a corroboration of theories about the nature of man in the previous decade. In conjunction with Herzberg's findings was the discovery by J. Sterling Livingston in his article, "Pygmalion in Management" (Livingston, 1969), that it is practically natural law that the performance of subordinates rises or falls to meet the expectations of managers.



Livingston dramatized his discovery by citing lines from George Bernard Shaw's play, *Pygmalion*, in which Eliza Doolittle explained to the mother of her teacher, Professor Higgins:

"You see, really and truly... the difference between a flower girl and a lady is not how she behaves, but how she's treated... I know I can be a lady to you because you always treat me as a lady, and always will." (Livingston, 1969, p. 81)

The ideas of great thinkers in the 1950s and 1960s have changed the way we think about human nature and organizational life, adding breadth, depth, and strength to our knowledge of leadership. The end of the following decade saw the inception of the first Ph.D. program in leadership studies at the University of San Diego in 1979. The first undergraduate *school* of leadership studies (the Jepson School) began at the University of Richmond in 1992. A few other universities now offer the Ph.D. in leadership studies *per se.* What we need is for these institutions or some others to step forward with graduate colleges of leadership studies, just as the University of Richmond has done at the undergraduate level. Such colleges would provide greater resources and power to faculty and students in advancing our treasure of knowledge in leadership in the tradition of those who have gone before us. Since a case can be made that leadership is one of the most needed fields of study in the world today, in the words of Douglas McGregor, "Shall we get on with the job?" (Bennis and Schein, 1966, p. 20).

References Available Upon Request



TEACHING COMPUTER FORENSICS AMPLIFIED BY CLOUD COMPUTING

Ludwig Slusky College of Business and Economics California State University – Los Angeles Los Angeles, CA 90032 Islusky@exchange.calstatela.edu

Parviz Partow-Navid College of Business and Economics California State University – Los Angeles Los Angeles, CA 90032 ppartow@exchange.calstatela.edu

Abstract

Cloud Computing (CC) as an Internet-based shared pool of configurable computing resources provides a new paradigm that comes with challenges and opportunities for Computer Forensics (CF). CF Investigation (CFI) is the use of analytical and investigative tools, techniques, and procedures to identify, collect, examine and preserve data evidence, which is magnetically stored and encoded. Evidence might be sought in a wide range of computer crime or misuse, including but not limited to theft of trade secrets, theft of, or destruction of intellectual property, and fraud. Thus, Computer Hacking Forensic Investigation (CHFI) detects hacking attacks and extracts evidence to report crime and conduct audits to prevent future attacks. On a larger scale of Homeland Security, CFI and Cybersecurity merge in preventive information security defenses.

The key trends identified in the CF field include rapid increase of data breach incidents; large and increasing amount of data that a typical CF investigation needs to cover; expansion of CF into mobile data; ever increasing computer power for data decryption; radical improvements in volatile data collection and analysis, and others. The purpose of the study is to report on the developmental process of offering a forensic course using Cloud Computing.



The framework of the CFI in the CC environment is a composition of concepts, models, deployment platforms, techniques, and tools that are characteristics of the CFI and CC. The CC model is characterized in terms of layers (five), service models (three), and deployment models (four).

Among three cornerstone characteristics of Information Security known as C-I-A (Confidentiality, Integrity, and Availability), CC promotes Availability. In the CC environment, the CF investigation is focused mostly on the server (hardware) layer of the CC model, but it is affected by all three-service models and the corresponding higher level layers of the CC Model. These Service Models (in hierarchical order) are *Cloud Software as a Service (SaaS)*, Cloud *Platform as a Service (PaaS)*, and "Cloud Infrastructure as a Service (IaaS).

CF and CC merge in two ways: (1) CC applications as targets of CF investigation, and (2) CC as a support platform for CF tools and techniques for investigation of a separate onsite or CC-based applications.

Cloud applications operate in a computing environment that is different from the traditional onsite client applications environment. It is mainly because the CC Applications are using a pool of Virtual Machines (VM) residing on different servers accessible over the Internet.

CF investigation of CC applications starts from cloud cartography, i.e., mapping the structure of cloud network, and eventually pinpointing the server where the VM used for that application resides.

VM platform in the CC environment significantly complicates CC security protection. For example, CC is particularly conducive to "cross-VM attacks" against a target server in a shared CC environment when a malicious VM is implanted in the same server where the target VM is. Multiple VMs, which reside on the same physical server where the investigation target VM is, create an obstacle for a CF investigator. Cloud environment makes evidence based on registry entries, temporary files, and logs unavailable when the user exits the session.



In onsite environment, CF analyst can extract evidence files without any assistance from the site operational personnel. In the CC environment, however, assistance of the CC provider in retaining and extracting data at the source may be required.

Other issues arising for CF in the CC environment are physical access to and confiscation of computer components; both are relatively straightforward procedures in traditional (non-cloud) environment, but very complicated in the CC environment. This complexity grows as both the number of VMs per server and the number of users per VM increase. Fortunately, there is a trend toward underutilization of VMs by reducing the number of accounts with permitted access to a VM. All these obstacles increase difficulty of finding evidence in cloud-based applications and affects court admissibility of the evidence that is found.

On the other hand, CC used as a platform to support CF while investigating a separate onsite or CC application offers several indisputable advantages. For example, a dedicated forensic server can be created but kept offline until it is needed. A copy of the VM can easily be distributed for use as new sources of evidence need forensic investigation.

CC significantly reduces time for data acquisition, data copying, transfer, and data cryptanalysis. If used in addition to onsite computing environment, it allows near instant imaging of the onsite data and placing it preserved in the cloud for investigation without any detrimental effect on the ongoing onsite operations. This way, Infrastructure as a Service (IaaS) used in CC clearly supports forensic readiness. CF in CC is already shaping up as a business. For example, a cloud provider, Terramark, is developing a cloud for forensic investigative work in collaboration with the FBI using forensics tools from Netwitness and Guidance Software.

Colleges and university are beginning to identify and manage applications and services available on the Web as Cloud Computing. Thus, Ohio State University issued CC Guidelines for Teaching, administrative



support, and research. Understanding of Security of CC environment enhanced with CF capabilities is critical for the future use of CC in governance and commerce and needs to be taught in universities and colleges as a part of information security curriculum.



A MULTIDIMENSIONAL PERSPECTIVE OF ORGANIZATIONAL COMMITMENT IN HIGHER EDUCATION

J. R. Smith Jackson State University Jackson, MS 39217 <u>jrsmith@jsums.edu</u>

> Kristina P. Gaylor Belhaven College Jackson, MS 39202

Alisa L. Mosley Jackson State University Jackson, MS 39217 <u>alisa.mosley@jsums.edu</u>

Jean-Claude Assad Jackson State University Jackson, MS 39217 jean-claude.assad@jsums.edu

Abstract

The purpose of this study was to examine the antecedents and consequences of organizational commitment among faculty at institutions of higher learning and to investigate how the Three-Component Model (TCM) of organizational commitment mediated the relationship between its antecedents and consequences. Business faculty members, employed at accredited collegiate business programs comprised the sample surveyed in this study. The study revealed that organizational commitment was an important factor in determining indicators of faculty intentions to stay with the college/university.

Keywords: Job embeddedness; Job satisfaction; Organizational tenure; Organizational commitment

Introduction

According to studies conducted by AACSB International accrediting association, the overall supply of business doctorates needs to the be replenished (Bisoux, 2002). According to statistics compiled by AACSB International (2003), the doctoral faculty vacancy rate increased from 5.4 percent vacancy in



1995 to 8.0 percent vacancy in 2001. The faculty shortage in the southeastern region exceeds the national average; the national average for unfilled doctorate faculty positions is 5.97 percent while the regional average is 6.76 percent.

The shortage of faculty members ultimately affects the students, who are the consumers of the service provided by colleges and universities. The lack of faculty impacts the quality of education provided to students. The purpose of this study was to examine the antecedents (job satisfaction, job embeddedness, organizational tenure) or micro level factors influencing commitment of business school faculty and consequences (intent to leave and performance of business faculty at institutions of higher learning); and to investigate how the Multidimensional Three-Component Model (TCM) of commitment mediates the relationship between the antecedents and consequences.

Literature Review

A continuous paramount concern to organizations in the public and private sectors, particularly colleges and universities, are being able to retain qualified and competent employees by increasing their levels of organizational commitment. If employees are committed, attached, and if they identify with their organization, then they are more likely to remain with the organization (Cohen, 2003). Studies have shown that there is a link between organizational commitment and decreased turnover (Porter, Steers, Mowday, & Boulian, 1974). Ameen, Jackson, Pasewark, and Strawser (1995) suggest that "building" commitment of faculty to the university or department may be a useful means of retaining faculty. However, most of the literature focuses on employee turnover within industries as opposed to higher education (Mitchell, Haltom, Lee, Sablynski, & Erez, 2001).

Organization Commitment: A Multidimensional Construct

While commitment in higher education has been studied; most studies evaluate organizational commitment using the unidimensional organizational commitment questionnaire (OCQ) (Mowday,



Steers, & Porter, 1979). This study examined organizational commitment among business school faculty employing the Three-Component Model (TCM) of commitment. In addition, this study examined job satisfaction, job embeddedness, organizational tenure as well as the outcome variables of intent to leave and performance.

Major Research Question & Hypotheses

The major research question that directed this study was:

How do the individual relationships of the Three-Component Model (TCM) of organizational commitment explain the relationship between the antecedents (job satisfaction, job embeddedness and organizational tenure) and consequences (intent to leave and performance) of commitment for business school faculty?

To address the research question, several employee organizational linkages and how they relate to the Three-Component Model (TCM) of organizational commitment were examined. The following study hypotheses were formulated and tested:

H1a: Job satisfaction is positively related to affective commitment among business school faculty.

H1b: Job embeddedness is positively related to continuance commitment among business school faculty.

H1c: Organizational tenure is positively related to normative commitment among business school faculty.

H2: Affective, continuance, and normative commitment are inversely related to turnover intentions.

H3: Affective and normative commitment are correlated with higher levels of performance.

Research Instruments

Organizational commitment was measured using Meyer and Allen's (1990) Three-Component Model (TCM). Job satisfaction was measured using Gregson (1991) scale. Intent to leave (stay) was measured



using Bluedorn's (1982) six-question Staying or Leaving Index (SLI). The construct job embeddedness was operationalized using the instrument constructed by Mitchell et al. (2001). Faculty performance was based on two factors: research productivity and level of service (Blackburn, Bieber, Lawrence, & Trauvetter, 1991).

Sample

Following a pilot study consisting of 170 business faculty members, a field survey structured undisguised questionnaire was used to collect data for this cross-sectional study. The sample target population was comprised of full-time faculty members employed by four-year AACSB-accredited business schools in Alabama, Mississippi, and Louisiana. Out of six hundred fifty (650) self-reported questionnaires mailed, completed questionnaires were returned by 154 faculty members for a 23.69 percent response rate.

Analysis & Results

The mean and standard deviation for all items in the measures were analyzed. The mean score value for the affective component of commitment was 4.23; the mean score value for continuance commitment was 3.73; and the mean score value for normative commitment was 3.07. The mean score value among respondents was 5.18, which indicates that on aggregate, faculty members are satisfied with their job. The mean score value for job embeddedness is 4.98, which indicated, on the aggregate, faculty demonstrate stay with an organization because they may be linked to the community in which they live or believe they fit within the organization. Respondents were asked how many years they have been employed with the present college/university, which was approximately 11 years.

Multivariate statistical analysis was utilized to test most study hypotheses. For Hypothesis 2 that states affective, continuance and normative commitment are inversely related to turnover intention, there was a significant inverse relationship exists between affective commitment and intent to leave [b = -.251 p <



.05, r^2 of 9%]. Additionally, there was a significant inverse relationship exists between continuance commitment and intent to leave [b = -.266, p < .01, r^2 of 9%].

The major research question was partially supported. Though the hypothesized relationships between the antecedents were not supported, several relationships were discovered among this population. The analysis revealed that affective commitment was strongly correlated with the job embeddedness subcomponent-"link to the community". The findings were partially supported for the relationships between the three component model of organizational commitment and the consequence variables. Faculty organizational commitment was found to be a significant predictor of faculty intent to leave. Using research and service as proxies for faculty productivity, committed faculty members were not the more productive when compared to uncommitted faculty. The findings indicated that committed faculty members are less likely to leave the organization.

Discussion

The research is not void of limitations. In survey research, respondents often exhibit an unwillingness to provide information. For instance, questions about income are personal and subjects frequently skip these types of questions (Boyd, Westfall & Stasch, 1977). Respondents are unwilling to respond to questions because they may believe someone (i.e. a supervisor or colleague) will have access to their responses. Respondents attempt to give answers that they think will please the interviewer or the researcher (Podsakoff & Organ, 1986).

There are significant practical and theoretical implications of the study's findings. Theoretically, studying business school faculty enhances the external validity of the commitment studies on a diverse population. It also examines the explanatory power that organization commitment has on faculty turnover and performance. Findings from this research study enhance the usefulness of the new construct job embeddedness in the literature. Job embeddedness and its subcomponent turned out to



be significant contributors to business faculty organizational commitment and behavior. As universities seek to retain faculty, factors enhancing job embeddedness may be instrumental in retention efforts. With scant resources and faculty shortages, it is imperative that academic administrators focus attention on the importance issue of commitment and embeddedness.

References Available Upon Request



THE BOLOGNA ACCORD: OVERVIEW AND MARKETING IMPLEMENTATION IN ROMANIA

Elisabeth J. Teal Mike Cottrell School of Business North Georgia College & State University Dahlonega, GA 30597 <u>ejteal@northgeorgia.edu</u>

Corneliu Munteanu Universitatea Alexandru Ion Cuza Iasi, Romania <u>cmuntean@uaic.ro</u>

G. Martin Izzo Mike Cottrell School of Business North Georgia College & State University Dahlonega, GA 30597 gmizzo@northgeorgia.edu

> Barry E. Langford University of Mississippi Tupelo, MS. 38804 <u>belangfo@olemiss.edu</u>

Abstract

The European Union's Bologna Accord was launched in 1999 when 29 European ministers of education agreed to a joint accord with the overall goal of establishing an authority and conceptual landscape called the European Higher Education Area. The reforms were phased in to be fully implemented by 2010. This paper provides a brief discussion of the Accord and highlights several strategic goals and initiatives, specifically the Educational Accumulation and Transfer Credit System (ETCS) and the Diploma Supplement (DS), followed by the current progress of implementation. Among the issues presented are: the level of preparation of the new 3-year bachelor's degree and the level of achievement relative to obtaining parity to Anglo-American curricula. These issues are addressed by examining them in the context of the Bologna Accord and an example of Marketing curriculum reforms instituted at the institutional level at a Romanian university using the three-year degree cycle. At the institutional level,



as implemented in Romania, the new 3-year degree initiative falls short of achieving parity with Anglo-American curriculum levels, and appears geared more toward preparing students for vocational instead of managerial positions in the workforce. This outcome mirrors many universities that have struggled at the institutional level to incorporate Bologna Accord reforms in highly diverse educational settings. However, the European Union ministers of education triumphed with attaining full international and national implementation of the Bologna Accord, a feat unmatched in the annals of higher education reform.

Keywords: Bologna Accord, EHEA, Higher education, Marketing curricula, 3-cycle degree

Introduction

Classes of higher learning worldwide are growing more internationalized in terms of the implications of different cultures working together, and living in a global society with a world view of the education process. Europe's higher education sector is currently undergoing substantial change with the creation of a conceptual landscape called the European Higher Education Area (EHEA) slated to be fully operational by 2010 (King and Verblik', 2007). Other trends include rising English language course offerings at universities in non-Anglophone countries, increased recruitment efforts for international students, the massification of higher education and cost-sharing proposals in many countries involving student and public funds (e.g. Tillman, 2010; Newby, 1999; Scott, 1998; Koch, 1997; et al.).

Globalization has been a marked trend in the past thirty years. Governments, businesses, educational providers, and non-profit organizations now view the entire world as a source of their inputs, best processes, and for distributing outputs to others. Educational providers have also experienced opportunities and challenges as a result of globalization. Some, like Jan Figel, European Commissioner for Education and Training, saw the Bologna Accord as an essential response in Europe to the opportunities of globalization in education (European Commission, 2009). However, some of the most



pressing challenges to international education include differences in language, the cost and availability of funding for the learning experience, the availability of visas for students, and the ability to award educational credit toward recognized degree programs. Many educators would agree that a classroom consisting of students of different nationalities, cultures, and perspectives provides a fertile environment for learning (Newby, 1999). This is facilitated through a student's personal learning, as well as his/her contribution to the learning of the entire class through the sharing of their personal experiences. Taken a step further, when students go to another country to study, in addition to the classroom learning that takes place, an appreciation for different nationalities, cultures, and perspectives may ultimately promote greater understanding between nations as these students move to the forefront of their careers in politics, business, education and non-profit organizations.

However, members of both the European and non-European academic community are routinely called upon to evaluate transcripts from European college students seeking to complete their undergraduate degrees, or apply to graduate programs abroad. These requests may come from and be received by universities within the EU, between universities in the EU and the U.S. and other countries. Problems were encountered as transcripts from European students who completed coursework internationally were not always easily readable, a transparency issue, and the courses lacked a specificity that made comparable determinations difficult, an issue of transferability (Lillie, 2003). Moreover, many education providers felt that European degrees were becoming less competitive than in North America, Asia, and Australia (Field, 2003). The Bologna Accord, also referred to as Declaration, Agreement or Process, was launched June 19, 1999 when 29 (currently 46) European ministers of education (ME's), each representing their European Union state, agreed to work toward a general overall framework for European higher education, and deal with the issues of transparency, transferability, and competitiveness. An integral part of the Bologna Accord was "increasing the international



competitiveness of the European system of higher education" and "ensuring that the European higher education system acquires a world-wide degree of attraction by 2010" (Grange, 2007, p.32). To meet these challenges, the ME's established three Bologna Accord priorities: (1) introduction of the three cycle system of bachelor, master, and doctorate programs, (2) recognition of qualifications and periods of study, and (3) assurance of quality programs. The components of the established priorities were to be fully implemented by 2007, with the goal of a globally recognized system by 2010.

Therefore, from a global perspective, it is important that academics have a clear understanding of the educational changes and initiatives of the Bologna Accord. Thus, the present study discusses the basics of the origin and adoption of the Bologna Accord designed to create a more compatible, comparable and coherent education system across the European Higher Education Area. The paper also discusses the current progress relative to implementing the Bologna Accord higher education initiatives. The final section provides a current example of how the Bologna Accord has been implemented in the marketing curricula of a Romanian university, making it easy to compare it to the marketing curricula at typical American universities.

The Bologna Accord

The University of Bologna, with over 850 years of history, is widely regarded as the world's oldest continuously degree granting institution. In 1158 Federico I, King of Italy and Holy Roman Emperor, promulgated the Constitutio Habita, in which the University was legally declared a place where research could develop independently from any other power (Zamagni & Zamagni, 2010). It was symbolically appropriate, then, for the ministers of education representing the 29 countries of the European Union (EU) in 1999 to call a meeting to discuss wide-sweeping education reforms at the University of Bologna. Based on extant research, it was argued that reforms needed in 1999 are still needed if Europe's higher education institutions (HEI's) are to match the performance of the best performing systems in the world,



notably those of North America and Asia (Burnett, 2007; European Commission, 2003; Field, 2003; Jacobs and van der Ploeg, 2006; Zervakis & Wahlers, 2007). Subsequently, the EU ministers of education (ME's) put in motion a series of structural reforms that were deemed necessary to make European higher education institutions more compatible and comparable, more competitive and more attractive for Europeans as well as for students and scholars from other continents.

The meeting culminated with the signing of the Bologna Accord, which had the purpose of providing an overall framework for higher education throughout the European Union which would facilitate the educational process within the EU, and also elevate the status of degrees awarded by EU universities in comparison with North American, Asian, and Australian universities. The Accord represents the culmination of a 42-year series of multinational agreements designed to foster the mobility of higher education students throughout Europe and beyond (Jacobs and van der Ploeg, 2006; Zervakis & Wahlers, 2007). The Accord was adopted in 1999 with the goal of being fully operational throughout the EU by 2010. The three priorities established by the Bologna Accord were: (1) introduction of the three cycle system of bachelor, master, and doctorate programs, (2) recognition of qualifications and periods of study, and (3) assurance of quality programs. The first priority was accomplished directly through the Bologna Accord. To oversee all priorities of the Bologna Accord, the European Higher Education Area was created.

European Higher Education Area (EHEA)

In early 2000, ME's of the European Commission set forth a broad framework called the European Higher Education Area (EHEA) to launch the Bologna Accord priorities (Grange, 2007). The ME's envisioned the EHEA as an open space that would allow students, graduates, and higher education staff to benefit from unhampered mobility and equitable access to top-quality higher education across countries and economic borders (Zervakis & Wahlers, 2007). The framework of the EHEA consists of



three Bologna Accord priorities: (1) transferability, the mutual recognition of degrees and other higher education qualifications; (2) transparency, meaning readable and comparable degrees; and (3) quality assurance promoted through cooperation among international and European associations of higher learning organized around the Bologna three-cycle structure. Although not prescriptive, the EHEA takes the priorities of the Bologna Accord at the international level and provides a general structure for implementation at the national and university levels (European Comm., 2003).

The New Three Cycle System of European Higher Education

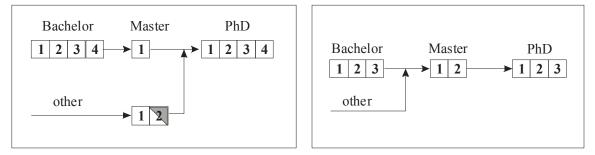
Prior to the Bologna Accord, the degree progression at many European universities followed the pattern of a four-year Bachelor's degree, followed by a one-year Master's degree (comparable to a US Master of Science degree), which might be followed by a one-to-two year further preparation before beginning the Ph.D., which generally consisted of a four year program. This pattern was generally similar to those implemented by universities in the United Kingdom, North America, Asia, and Australia.

The new three cycle system (see Exhibit 1) of higher education, established by the Bologna Accord, called for a new three year Bachelor's degree, followed by preparatory study for the new two-year Master's degree, which may be followed by a Ph.D. which typically is a three year, or more, program.

Exhibit 1. Curriculum degree plan at CUZA University

b) post-BOLOGNA

a) pre-BOLOGNA





As an education reform movement, the Bologna Accord is almost 9 years old, but most people outside of Europe are not familiar with the Accord, nor aware that the new structure of European degrees is based on this 3-cycle model. Further, at the curriculum level, knowledge of specific reform initiatives is less well known. These topics are addressed in basic detail, next.

Education Credit Transfer and Accumulation System (ECTS)

The first initiative of the European Higher Education Area (EHEA), the Education Credit Transfer and Accumulation System (ECTS), is aimed at transferability of coursework and degrees. It addresses the second priority of the Bologna Accord, which is recognition of qualifications and periods of study, and the first principle of the EHEA, which is mutual recognition of degrees and other higher education qualifications. It was first introduced in 1989 as the framework of the Socrates educational exchange programs for students, teachers and other users of the educational system, and in particular the European Community Action Scheme for the Mobility of University Students (ERASMUS) (Field, 2003). In short, ERASMUS created a mobile exchange program to facilitate credit transfer for tertiary college students to study abroad at schools in one of 31 member nations, predominantly in the European Union (Field, 2003). As adopted under the EHEA in 2000, the Education Credit Transfer and Accumulation System (ECTS) is the basis on which student workloads required to achieve the objectives of an educational program are determined (European Commission, 2003). Thus, ECTS spells out the workload requirements in terms of study hours and earned credits of the programs specified under the terms of the Bologna Accord 3-cycle degree, based on learning outcomes and competences to be acquired.

ECTS was designed to facilitate the transfer of education credits, and it is the only credit system which has been successfully tested and used across Europe. When implemented, the system facilitates the recognition of specified periods and courses of study, and thus enhances the quality and volume of student mobility at the institution, national and European levels (Bekhradnia, 2004). The basic



framework of the ECTS fits into the 3-cycle degree format of the Bologna process. Since its inception, first as an ERASMUS provision and then enhanced under EHEA, the ECTS system has successfully removed obstacles to the universal recognition of degrees between countries, and has satisfied one of the key objectives of the Bologna Accord: transferability.

Diploma Supplement (DS)

While the ECTS helped in achieving greater *transferability*, the ministers of education decided to implement another initiative aimed at the Bologna Accord goal of increasing *transparency* [European Commission, 2002]. Educational qualifications have evolved on a worldwide scale under the impact of rapid economic, political/regulatory and technological changes. Additionally, as different societies become increasingly mobile, the members from these societies seek fair recognition and evaluation of their higher education credentials and qualifications. Original diploma credentials and transcripts may not provide sufficient information, making it very difficult to gauge the level and qualifications of a diploma holder, without appropriately detailed explanations. Initially a provision under United Nations Education Scientific and Cultural Organization (UNESCO), the Diploma Supplement was revised and adopted at the 2002 Bologna progress meeting in Brussels by members of the European Commission and the Council of Europe. While the introduction of the Diploma Supplement was first discussed in 2002, it was linked to the successful implementation of ECTS and instituted in 2005 (European Commission, 2005).

The DS accomplishes one of the key objectives of the Bologna Accord, transparency, as it improves transparency and facilitates the academic and professional recognition of diplomas, degrees, and certificates earned across countries in an internationally understandable form. When students have more and better employment and study opportunities, the granting institution of higher education also benefits. Together the Bologna Accord 3-Cycle Degree program, the ECTS, and DS represent the three



major structural changes in higher education in Europe. A progress report by the Ministers at the London conference stated that structural change must be matched with proper redevelopment of the curricula, and often this has not been completed (European Commission, 2007).

An earlier 2006 report by the European Universities Association states that, "over half of European universities have reviewed their curricula entirely, using the Bologna reforms to implement more student-focused approaches" (Zervakis & Wahlers, 2007, p. 34). Reality at the institutional level, albeit the area where the greatest amount of discretion lies, is much "messier" than the official government reports and declarations, (Hunter, 2010). For example, confusion exists regarding the objectives of the first cycle of the Bologna 3-cycle degree program. Many schools mistakenly regard the first cycle (Bachelor) as a compressed version of former long-cycle programs, while others have shortened programs by extending senior-level course to the Master's degree (Marga, 2008). In most cases, administrators have alleged that there has not been adequate time for institutions and academics to address reforms in a comprehensive way, and to benefit from the opportunities offered through restructuring the curricula (Tillman, 2010; Zervakis & Wahlers, 2007). The next section examines the implementation of the Bologna Accord in the Marketing curriculum at a Romanian university.

Marketing Implementation in Romania

Romania is an independently recognized republic located in southern Europe with a population of 21.5 million people, and entered the European Union in 2007. Alexandru Ioan Cuza University (UAIC) is located in Iasi, Romania, which is in the province of Moldavia and about 300 miles north of Bucharest. Iasi is a major city with a population of about 400,000, and UAIC has an enrollment of approximately 37,000 students. Business and economics studies are carried out in the school of Facultatea de Economie si Administrarea Afacerilor (FEAA) which has a full-time enrollment of approximately 9,000 students and includes about 1300 marketing majors. UAIC adopted the Bologna Accord reforms at the



institutional level in 2004 for the 2005-06 academic year, and met an institutional goal by having curricula revisions in place when the first post-Bologna three-year cycle students graduated in 2008, just over one year after Romania's membership in the EU.

With respect to the priorities of the Bologna Accord, it appears that UAIC has achieved several primary goals. First, UAIC has implemented a 3-cycle degree program with a 3 year Bachelor's degree. Second, UAIC appears to be on the path to greater transparency and transferability having adopted ECTS and DS as intended by the Bologna Accord. What remains and the subject of the next section is discussion of student preparation of the new 3-year bachelor's degree, determining if the degree of achievement relative to obtaining parity to Anglo-American curriculum levels has been attained.

Student Preparation under the New 3-Year Bachelor Degree in Marketing

Exhibit 2 shows the degree requirements pre- and post-Bologna for graduation with a bachelor's degree with a concentration in Marketing at UAIC. Faced with the task of changing a 4-year degree curriculum to a 3-year degree, faculty of FEAA had two choices. The first method was to shorten the curriculum by paring down the number of courses. This may be accomplished in a variety of ways, such as combining the content for two similar courses into one and/or eliminating courses that are deemed non-critical to the achievement of the degree. The second method would be to change the focus of the 3-year degree by reserving some upper division, capstone and seminar-type courses for study at the Master's level. The faculty at FEAA used a mixture of both methods with varied outcomes. However, prior to discussing these outcomes, it is of interest to note that although the Bologna Accord mandated shrinkage from a four to a three year degree program, UAIC chose to increase required foreign language credits from 24 to 30, with apparently little difference in course content and hours of study. This seems like a move in the wrong direction since these language credits could have been used to add more



analytical courses to the curriculum, or to preserve courses such as *Marketing Management* that were dropped.

In a positive move, the Faculty at FEAA chose to combine Principles of Law with Business Law and retain the latter in the new 3-year program. However, all Marketing and Business Electives were eliminated. Instead, two popular electives, *Merchandising* and *E-Marketing*, were made required courses. Further, at the time the Bologna Accord was adopted at UAIC, the curriculum was already in the process of revision to remove courses with a managerial perspective. As such, the following courses were dropped from the Marketing degree program: Total Quality Management; Business Diagnosis; and Project Management. Some courses were re-named and/or repositioned. For example, Negotiation Techniques became Selling Techniques, a course more focused on personal selling skills. In a similar vein, Distribution and Logistics became Marketing Logistics. A single, seemingly adequate course titled Advertising and Promotions became 2 courses, Promotion Techniques and Advertising Design. The content of the latter course was tailored toward teaching students how to develop graphics and visuals. The rationale explained for this 1-to-2 course change was to give students a more hands-on approach to developing communications pieces, brochures, flyers and the like, and graphic design applications, printing, layout and design. However, these manual skills development in curriculum changes, combined with Merchandising and E-marketing, signal to the employment marketplace that the new 3year bachelor's degree prepares students to enter positions of a more vocational nature than those with a more managerial emphasis. This is a major departure from the type of curriculum development in U.S. schools of higher learning that promote managerial approaches with more of an analytical emphasis. The most dramatic changes involve other upper-division and capstone marketing courses. For example, eliminated from the 3-year bachelor's degree, and moved to the master's level of study are Sales Force Management, Services Marketing, Public Relations, Marketing Management, and Senior Seminar in



Marketing. While it could be argued that the first three courses could be properly listed as upperdivision Marketing electives, and thus could be eliminated from the 3-year program, eliminating the latter two, *Marketing Management* and *Senior Seminar in Marketing*, seems to promote a vocational rather than a managerial perspective, and also adds a certain closure to earning a bachelor's degree in Marketing. While these curriculum changes advocate preparation, and are fitting within the scope of the Bologna Accord, they represent a fundamental departure from the emphasis of most Anglo-American programs that have a managerial emphasis.



Exhibit 2.

CURRICULUM for Marketing programs at CUZA University

_					81 8		•			
_	4-YEAR PROGRAM	hrslwe	ettedi	crdts.lyr	3-YEAR PROGRAM	hrs we	ek redit	critts/Yr		
1-st semester	Business Information Systems Business Calculus & Algebra Microeconomics Principles of Accounting Foreign Lang. 1st (Engl./Fr.)	3+2 2+2 2+2 3+2 1+1	6 7		Business Information Systems Business Calculus & Algebra Microeconomics Principles of Accounting Foreign Language 1st (Engl./Fr.) Business Law >>a	2+2 2+2 2+2 2+2 2+2	5 5 5 5 5 5			
2-nd semester	Macroeconomics Business Software Principles of Statistics Foreign Lang. 1st (Engl./Fr.) Principles of Law >>a Business Elective ><	2+2 3+2 3+2 1+1 2+0 2+0	7 7 3	60	Macroeconomics Business Software Principles of Statistics Foreign Language 1st (Engl./Fr.) Financial Accounting INTERNSHIP	2+2 2+2 2+2 1+1 2+2	5 5 5 5 5 5	60		
3-rd semester	Principles of Finance Principles of Management Financial Accounting Business Law >>a Foreign Lang. 1st (Engl./Fr.)	3+2 2+2 3+2 2+2 1+1	6 6 4		Principles of Finance Principles of Management Econometrics Foreign Language 1st (Engl./Fr.) Business Communications >>b Merchandising >>f	2+2 2+2 2+2 1+1 2+2 2+2 2+2	5 5 5 5 5 5			
4-th semester	Principles of Marketing Money and Banking Foreign Lang. 1st (Engl./Fr.) Econometrics Business Elective >>b Business Elective >< INTERNSHIP	2+2 2+2 1+1 2+2 2+0 2+0	6 3 6	60	Principles of Marketing Money and Banking Foreign Language 1st (Engl./Fr.) Consumer Behavior Promotion Techniques >>c INTERNSHIP	2+2 2+2 1+1 2+2 2+2	5 5 5 5 5 5	60		
5-th semester	Marketing Research Consumer Behavior Services Marketing> Advertising & Promotions >>c Foreign Lang. 2nd (It/Sp/Grm) Business Elective ><	2+2 2+2 2+1 2+2 1+1 2+0			Marketing Research Advertising Design ++ Selling Techniques >>e Direct Marketing Foreign Language 2nd (It/Sp) Purchasing	2+2 2+2 2+1 2+1 1+2 2+1 2+1	5 5 5 5 5 5			
6-th semester	Sales Force Management> Direct Marketing Distribution and Logistics >>d Marketing Management> Foreign Lang. 2nd (It/Sp/Grm) Business Elective >< INTERNSHIP	2+1 2+2 2+2	5 5 5 4 4 2	60	International Marketing Marketing Logistics >>d E-Marketing ++ Int'l Trade Techniques ++ Foreign Language 2nd (It/Sp) Financial Management ++ THESIS	2+1 2+2 2+2 2+1 1+2 2+1	5 5 5 5 5 5	60		
7-th semester	Purchasing Public Relations> International Marketing Total Quality Management >< Foreign Lang. 2nd (It/Sp/Grm) Senior Seminar in Mktg> Business Elective ><		5 5 5 3 5 3		*) "Hours/week" column indicates weekly hours each course is taugh components : LECTURE and SEM For example, "2+1" indicates that a taught with 2 lecture hours and 1 ><) Courses that have been comple	taught in two SEMINAR. that a course is nd 1 seminar hour.				
8-th semester	Business Diagnosis >< Project Management> Negotiation Techniques >>e Senior Seminar in Mktg> Marketing Elective >>f Marketing Elective >< Business Elective >< THESIS	2+1 2+1 0+2 2+1 2+1 2+1 2+0	3 3	60	 from Marketing Bachelor program >>) Courses that have been transfe 3-year program, with a different r Correspondence is indicated by ->) Courses that have been transfe post-Bologna Master in Marketing ++) Courses that are new into the second courses 	am. sferred into the tt name. by letters. sferred into the ng programs.				
-					<u> </u>					



Discussion

The Bologna Accord has ushered in sweeping educational reforms that have given the European higher education a new identity, one that may not be completely formed for some time to come. At the international and national levels, progress can be measured in the success that nearly all members have adopted and use the ECTS and DS. These measures helped restructure and organize what were historically diverse education systems — enhancing the transparency and transferability, boosting mobility and global acceptance. At the institutional level, some universities, UAIC a case in point, still struggle with the concept of competitiveness, an idea that remains in opposition with many academics and practitioners. However, based on the 10-year success of the Bologna Accord, a new wind may be blowing across campuses internationally as 15 countries outside the EHEA, including the U.S., attended the 2009 biennial meeting of the European Commission ministers of education to initiate a global dialogue on higher education (European Commission, 2009; Hunter, 2010). The Bologna Accord brought wide-sweeping changes to the educational landscape in the EU, and it is incumbent that universities outside understand the impact of the changes. These major changes are influential to the qualifications of EU higher education graduates as they apply for employment and/or admission to study programs abroad.

An Unabridged Version of this Manuscript with References available upon request



THE REWARDS AND RISKS OF GREEN MARKETING

Scott Testa Business Department Cabrini College Radnor, PA 19087 <u>stesta@cabrini.edu</u>

Abstract

As the green marketing philosophy spreads into mainstream culture, so does the opportunity to reach a broader audience with a positive message about your organization? Learn about the green movement and how to integrate earth-friendly practices into your current organizations marketing approach. Learn more about consumers' perception of green companies and their practices, as well as which green marketing techniques that are the most appealing and effective.

Keywords: Green marketing, International Organization for Standardization, ISO 14000

Introduction

It seems that all businesses must move toward "greening" their products just to stay competitive in the marketplace. The good news is that this green wave is leading to the production of new products made from natural materials, products with fewer chemical emissions and products that conserve natural resources. In fact, the number of "green" products on the market has increased steadily in recent years, leading 43 percent of companies to increase spending on green marketing in 2009. [1] Eighty-seven percent of polled consumers are concerned about the environmental and social impacts of the products they buy, and 33 percent of those polled indicated a willingness to pay a premium for "green" products.[2] The "green building" industry alone is projected to be a \$60 billion industry in 2010, up from \$7 billion in 2005.[3]

How a company makes the leap into green though can either lead to great success and an increased presence in this environmentally conscious marketplace, or it can lead to additional problems and more



liability. Thus, it is essential to understand what it means to "green" your product and consider the risks of "going green" up front in order to avoid ending up in the courtroom down the road.

What Makes a Green Product "Green?"

There are almost as many definitions of "green products" out there as there are colors in the rainbow. There is no single standard for determining whether a product qualifies as "green." Rather, the analysis focuses on the materials used to produce a product and where those materials originated, with special consideration given to the manufacturing, use and disposal of the product. Additionally, products may be considered "green" based on multiple characteristics or overall environmental performance.

There seem to be five main categories of "green" products. First, green products are made with salvaged, recycled or agricultural waste content. This is pretty much self-explanatory and focuses on the composition of the product itself. Second, green products conserve natural resources. These products may reduce material use, which means that products do not need to be distinctively green on their own as long as they reduce the materials needed for a project. The second category also includes products with exceptional durability or low maintenance, as well as rapidly renewable products (e.g. biodegradable, low in chemical emissions or produced from agricultural crops).

The third, and perhaps most easily definable category, includes those products that avoid certain chemical emissions. These products are not always "good" for the environment, but they are superior to like products on the market (e.g. a sealant with less volatile organic compounds (VOCs) than its competitors). Fourth, products can be green if they contribute to a safe, healthy building environment, such as reducing or blocking the spread of indoor air pollutants (e.g. zero or low VOC paints), and fifth, green products include those that save energy or water (e.g. energy efficient clothes washers and dryers).

A product, however, can be considered "green" for more than one reason. For example, an adhesive



that is manufactured to emit less VOCs than market competitors may be considered green pursuant to the definitions in categories (2), (3) and (4) above. So not only are the definitions broad and somewhat intangible, but the determination of how to meet these qualifications can vary as well.

Labeling the "Green" in the Product

So once you define your product as "green," the challenge becomes determining the best way to communicate this fact to the marketplace in a way that accurately represents its characteristics and potential benefits. Thus, it is important to consider green certification, which is the voluntary eco-labeling of a product. Eco-labels present a claim of an environmental benefit, either self-declared or pursuant to one of these certifications. The certification landscape, however, is broad and it is easy to confuse a valid, independent third-party certification with a simple self-reporting directory that has no external mechanism to ensure the validity of the party's representations.

In short, the various green certification programs operate by comparing products or services that fall within the same industry sector against other like products, evaluating whether the product in question meets the identified scientific criteria for the lifecycle of that product (from initial production to final disposal). Although the scientific criteria that serve as the cornerstone of these certifications may vary, the strongest certification programs have examined the scientific aspects of the relevant categories of products to identify these criteria, and/or have adopted the International Organization for Standardization (ISO) criteria, which set forth voluntary standards for environmental management systems, including labeling, which is part of ISO 14000. Whether it is Green Seal, Eco Logo, Green Guard or some other certification, overall, the goal is to identify those products with the highest level of protectiveness of human health and the environment.

In order to obtain the certification, the manufacturer actually tests its product to see if it meets the applicable scientific criteria. In the case of the strongest, most reliable certifications, the organization



providing the certification independently verifies that the requirements have been met. Otherwise, the validity of the representations are left to the competition to evaluate.

New certifying entities and labeling programs continue to emerge daily. For example, Wal-Mart recently announced that it will launch a program that will include "green" ratings on all goods it sells. To compile this information, Wal-Mart plans to send a list of questions to suppliers so that it can make a preliminary determination of the environmental impact of the supplier's manufacturing process (e.g. carbon dioxide emissions, water usage). Thus, the Wal-Mart consumer will see a "green" label on many of the products in its stores, but must keep in mind that the label is limited to how the product was made and provides no representation regarding the performance of the product.

References

[1] The Green Outlook 2009, available at

www.sustaincommworld.com/pdfs/The_Green_Outlook_Brochure_Appleton.pdf

[2]Cultivating the Green Consumer, Stanford Social Innovation Review, Fall 2008, available at

www.ssireview.org/articles/entry/cultivating_the_green_consumer/

[3] McGraw Hill Construction Report, 2008



GREEN MARKETING: ARE ENVIRONMENTAL AND SOCIAL OBJECTIVES COMPATIBLE WITH PROFIT MAXIMIZATION?

Scott Testa Business Department Cabrini College Radnor, PA 19087 stesta@cabrini.edu

Abstract

The goal of this paper is to open a discussion about green marketing. We raise questions regarding how firm governance impacts the ability of firms to incorporate environmental objectives into profitability. Additionally, we discuss the green marketing strategies that firms have chosen to use.

Keywords: Green marketing, profit maximization

Introduction

While debates about how to cope with the impact of human activity on the environment continue in full force, such as the global warming talks that dominate political circles, businesses have entered the 'green' market. Firms typically provide consumer eco-products or adopt green practices, and some firms simultaneously offer eco- or green products while committing to eco-production and/or eco-philanthropy. Green business strategies have appeared in a wide range of industries and address a wide range of eco-issues. A few examples of green products are: hybrid automobiles, eco-friendly paint, organic food, recycled copy paper and environmentally friendly cleaning products. Businesses also promote their recycling efforts, use of wind power, or other practices intended to minimize the environmental impact of their actions.

An important aspect to consider is that while green products and businesses typically address environmental externalities, popular use of the term 'green' extends beyond the environment and encapsulates social issues, which may include paying fair wages, fair treatment of labor and



animal welfare. In practice, according to market researchers, green products are marketed to the market segment that was recently minted as the 'LOHAS' (lifestyles of health and sustainability). This market segment of consumers may not separate 'green' from 'healthy' when making purchasing decisions. These consumers, who com- prized 17% of US consumers in 2006, are estimated to have purchased approximately US\$300 billion worth of green merchandise4,5. Thus, in this paper, we consider this broader category when we refer to green products and green firms.

Public commentators have questioned firm motives behind this eco-focus, and their questions are rooted in a larger debate surrounding the role of private enterprise in achieving environmental objectives6–12. The questions include: can businesses be relied upon to achieve environ- mental objectives? Will companies permanently incorporate longer-term environmental objectives into their mission or is the eco-focus a marketing strategy that encompasses a short-term response to consumer demand? How should consumer confusion arising from green marketing be addressed?

An obvious, but not simple to answer, follow-up question is how to best be a steward of the environment in today's world, particularly in economies where consumption comprises a large percentage of GDP. That externalities result from consumption is widely understood. Because of these externalities, production costs do not represent society's true costs, leading to inefficient production and consumption levels. This leads us to question whether the best long-run strategy is to follow the adage 'reduce, reuse and recycle', consequently consuming less, or focus on consuming eco-friendly products, whose production and distribution have a smaller impact on the environment, or some combination of the two?

These questions are complex and we offer no definitive answers. Instead, the goal of my paper is to open a discussion of green marketing and bring forward key questions for empirical research and policy considerations. I start by asking how firm governance may impact the ability of firms to incorporate



environmental objectives into a profit maximization paradigm. We then discuss how firms that have entered the green industry market their commit- mint to the environment to consumers. We end by bringing forward issues surrounding the enforcement of green labels and potential consumer confusion.



HOW GREEN MARKETING AFFECTS CORPORATE POLICY

Scott Testa Business Department Cabrini College Radnor, PA 19087 <u>stesta@cabrini.edu</u>

Abstract

The purpose of this study is to examine how green marketing can be developed and what incentives there are for companies to do so. Organizations have accepted green marketing as a part of their strategy. In this paper the author is trying to identify key ideas in relation to promote green product that may be most relevant to both scholars and the practitioners of green marketing. This paper will attempt to introduce the terms and concept of green-marketing; about the importance of green marketing; examine some reasons that make the organizations interested to adopt green marketing philosophy and highlight some problems that organization may face.

Keywords: Green marketing; Corporate policy

Introduction

What is Green Marketing?

Green marketing has been an important academic research topic since it came about(Coddington , 1993; Fuller, 1999; Ottman, 1994). Attention was drawn to the subject in the late 1970's when the American Marketing Association organized the first ever workshop on"Ecological Marketing[®] in 1975 which resulted in the first book on the subject, entitled"Ecological Marketing [®] by Henion and Kinnear in 1976.

The first definition of green marketing was according to Henion (1976); "the implementation of marketing programmers directed at the environmentally conscious market segment" (Banerjee, 1999, p.18). One of the latter definitions is Fuller's (1999, p. 4): *The process of planning, implementing, and*



controlling the development, pricing, promotion, and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met, (2) organizational goals are attained, and (3) the process is compatible with ecosystems.

The first indication of consumer interest in green products came through Vandermerwe and Oliff^{**}s (1990) survey. This stated that more than 92% of European multinationals claimed to have changed their products in response to green concerns and 85% claimed to have changed their product systems (Peattie & Crane, 2005). Green product introductions increased by more than double to 11.4% of all new household products in the USA between 1989 and 1990, and continued to rise to 13.4% in 1991 (ibid.).

The promotion of environmentally safe or beneficial products, green marketing began in Europe in the early 1980s when specific products were identified as being harmful to the earth's atmosphere. As a result, new "green" products were introduced that were less damaging to the environment. The concept caught on in the United States and has been gaining steadily ever since.

Divergent aspects of green marketing include ecologically safer products, recyclable and biodegradable packaging, energy-efficient operations, and better pollution controls. Advances produced from green marketing include packaging made from recycled paper, phosphate-free detergents, refillable containers for cleaning products, and bottles using less plastic.

As today's consumers become more conscious of the natural environment, businesses are beginning to modify their own thoughts and behavior in an attempt to address the concerns of consumers. Green marketing is becoming more important to businesses because of the consumer's genuine concerns about our limited resources on the earth. By implementing green marketing measures to save the earth's resources in production, packaging, and operations, businesses are showing consumers they too share the same concerns, boosting their credibility Pride and Ferrell (1993) Green marketing, also alternatively known as environmental marketing and sustainable marketing, refers to an organizations



efforts at designing, promoting, pricing and distributing products that will not harm the environment. Polonsky (1994) defines green marketing as .all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment.

Mintu and Lozada(1993) defined green marketing as the application of marketing tools to facilitate exchanges that satisfy organizational and individual goals in such a way that the preservation, protection and conservation of the physical environment is upheld". According to Stanton and Futrell(1987)-all activities designed to generate and facilitate any exchanges intended to satisfy human needs and wants; therefore it ensures that the interest of the organization and all it consumers are protected, as voluntary exchange will not take place unless the buyers and sellers are mutually benefited. The definition also includes the protection of natural environment by attempting to minimize the detrimental impact; this exchange has on the environment.

This second point is very important for human consumption by its very nature is destructive to the natural environment. To be more accurate products making green claims should state they are "less environmentally harmful" rather than "environmental friendly." Thus green marketing should look at minimizing environmental harm, not necessarily eliminating it.

The industrial houses have recognized that the entire system of production and consumption determines environmental quality. Environmental impacts are a function of the way services are provided and the way goods are produced, delivered, used and disposed off. Production and consumption are considered together because gains made by controlling, reducing or minimizing pollution from production can be soon overshadowed by the impacts from concurrent increases in the scale of demand for those services and goods from growing consumer base. So we can see that green

289



marketing encompasses a broad range of activities including product modification, change to production process, packaging change as well as modifying advertising.

Problems with Green Marketing

The ongoing marketing paradigm, according to Peattie (1999, p. 57), is based on using the earth's resources and systems in an unsustainable manner. The traditional view on corporate social responsibility, which argues that corporation manager's and director's only responsibilities are to the "owners" of the firm and to maximize profit, started changing in the early nineties to include a responsibility not only to those with a vested interest in the corporation (Klonoski, 1991). Instead a company must consider the effect of its actions on all stakeholders, including nature and animals (ibid.). Many of the serious environmental issues we face are due to modern development and the pursuit of economic growth (Peattie, 1999, p. 58). Shrivastava claims that in order to tackle these matters, a paradigm shift to sustainable production and consumption will need to take place (referred by Peattie, 1999, p. 58). However, making these crucial changes occur requires more than individual change; change on a societal and economic level will be necessary (Grant, 2007, p. 47; Hartmann & Ibáñez, 2006). Hence, governments will need to commit to developing forward thinking environmental policies (Peattie, 1999; Grant, 2008). Corporations must integrate greening into their business strategy and invest in the development of it as they would any other aspect of their business (Polonski & Rosenberger, 2001).

Finally, consumers have to actually purchase the environmentally friendly products they, so far, only claim to be interested in (Ginsberg & Bloom, 2004). In the end though, going green needs to make business sense for the corporation and not require a compromise on product attributes for the consumer (ibid.).



Marketers have a tremendous potential to help make this shift happen by pushing organizations to implement some form of a green marketing strategy (Peattie & Crane, 2005; Grant, 2007, p.32). Marketers have the power to help sell new lifestyle ideas (Grant, 2007, p. 1) According to Ottman (1993) green marketing serves two key objectives:

1) To develop products that incorporate consumers" needs for convenience, affordable. Pricing and performance while having a minimal impact on the environment.

2) To project an image of high quality, including environmental aspects, both in regards to product attributes and the manufacturer's track record for environmental compliance.

If a paradigm shift from conventional to green marketing occurs, corporations will need to incorporate sustainability into their strategies or risk being left behind (Grant, 2008). It will be important for organizations and marketers to be well-versed on the subject and have a thorough understanding of green marketing and how it can create value. Since the mid-nineties environmental legislation has increased, leading to a higher level of awareness of environmental issues in the business community and many corporations being required to consider these issues in their strategic planning in order to meet stricter environmental standards (Banerjee, 1999, p. 18; Olson, 2008). Regardless of legislation and standards many people are calling for corporations in general to take more responsibility for their actions and the consequences thereof.

Green marketing concept is fairly young and as a consequence it has not been extensively explored or research yet (Grant, 2007, p. 9; Hartmann & Ibáñez, 2006; Baker & Sinkula, 2005).Olson (2008) claims that while many corporations have implemented some form of green initiative, very few have actually established an enterprise-level green strategy. He furthers states that, while it may vary depending on industry and possibly by individual business, early adoption of a formalized and well-articulated green strategy can allow companies the opportunity of a competitive

291



advantage. Considering Olson's statement, one wonders how corporations, that have indeed incorporated some form of green thinking into the business, have done so and for what reasons. Therefore, the purpose of this study is to gain a deeper understanding of the subject of strategic green marketing by examining how strategic green marketing can be developed and what incentives companies have to do so. In order to fulfill this purpose, four research questions were developed.

One objective of a marketing strategy is to optimize the marketing mix in relation to the wants and needs of the target market (Fuller, 1999, p. 330). Data from the targeted business consumers can provide valuable input for the decision making process (ibid. p. 320). Fuller (1999, p. 330) further states that mass-undifferentiated marketing will often fail to ensure customer satisfaction and profit and that segmenting the market provides a more realistic market interpretation. The first research question is therefore: Environmental issues have gained importance in business as well as in public life throughout the world. It is not like that a few leaders of different countries or few big renowned business houses are concerned about the day to day deterioration of oxygen level in our atmosphere but every common citizen of our country and the world is concerned about this common threat of global warming.

So in this scenario of global concern, corporate houses has taken green-marketing as a part of their strategy to promote products by employing environmental claims either about their attributes or about the systems, policies and processes of the firms that manufacture or sell them. Clearly green marketing is part and parcel of overall corporate strategy; along with manipulating the traditional marketing mix (product, price, promotion and place), it require an understanding of public policy process. So we can say green marketing covers a broad range of activities. Different writers has given different definition about green marketing which tried to cover all major components of green marketing



According to Polonsky (1994) - green or environmental marketing consists of all activities, designed to generate and facilitate any exchange indented to satisfy human needs and wants, such that the satisfaction of these needs and wants occur with minimum detrimental impact on the natural environment.

References Available Upon Request



PRIVATE BENEFITS, MARKET SENTIMENT, AND INSTITUTIONAL OWNERSHIP CHANGE

Yong Wang School of Business and Economics Lynchburg College Lynchburg, VA 24501 wang.y@lynchburg.edu

Abstract

This study investigates the relationship between private benefits and institutional ownership change in high-sentiment markets. High-sentiment markets are usually associated with firm overvaluation and thereby offer institutional investors a chance to sell shares and profit from overvaluation by forgoing the private benefits otherwise obtainable. Empirical examination reveals that, in high-sentiment markets, institutional investors sell more shares low in private benefits (dual-class firm share) than shares high in private benefits (non-dual-class firm share). Subsample analyses show that public pension funds drive this effect.

Keywords: private benefits, institutional ownership change, high-sentiment markets

Introduction

This study postulates that private benefits are among the motivations of institutional ownership thereby predicting the distribution and adjustment of institutional ownership. To examine this postulation, this study categorizes institutional ownership in firms with a dual-class voting structure as low-private-benefits ownership and ownership in firms with single-class voting structure as high-private-benefits ownership. In dual-class firms, insiders dominate control and only weakly demand to coalesce with block holders in a control contest, institutional investors are less likely to extract private benefits. In non-dual-class firms, the dispersed ownership confers on institutional investors a pivotal role which grants them ample opportunities for private benefits extraction.



High-sentiment market, characterized by firm overvaluation and low price impact of selling (e.g., Maug, 1998; Baker and Wurgler, 2006), provides an ideal condition for institutional investors to profit from overvaluation by selling their holdings in dual-class firms. In contrast, such institutional selling is less likely to be observed in non-dual-class firms and low-sentiment markets.

The empirical results show that institutional not only sell more dual-class firm shares in high-sentiment markets than in low-sentiment markets, but they also sell more dual-class firm shares in high-sentiment markets than they sell non-dual-class firm shares in either high or low-sentiment markets. Analyses on the subsamples by institutional identity show that public pension funds, renowned for their social investment strategy and tremendous size, drive the differences in sentiment-related ownership change between dual-class firms and non-dual-class firms.

Private Benefits as an Institutional Ownership Motive

Private benefits can flow for large institutional investor such as banks and asset management firms from self-dealing and situations involving conflict of interest (e.g., Djankov, La Porta, and Shleifer, 2005). Public pension funds are among the most notable institutions actively exercising voting power to influence the operation of portfolio firms. The politicized board of public pension funds usually subjects to political pressure and makes decisions reflecting their constituents' will (Romano, 1993). In general, Institutional investors of dual-class firms consume less private benefits. The strong insider control of dual-class firms basically eradicates the demand to coalesce in a control contest with other block holders (Zingales, 1995) and deters other investors from seeking control rights (Zweibel, 1995).

Test Design: Linking Private Benefits and Ownership Change by market sentiment

Table 1. Institutional ownership change and the tradeoff between private benefits and overvaluation



	D	F 1 . 1	Value ir	Inflation	Net gain fro	om selling	Decision		
Frims Private F Benefits		Fundamental Value	High	Low	High	Low	High	Low	
	Delicitits Value		Sentiment	Sentiment	Sentiment	Sentiment	Sentiment	Sentiment	
Н	2	10	1	0	-1	-1	Not Sell	Not Sell	
М	1	10	1	0	0	-1	Indifference	Not Sell	
L	0	10	1	0	1	-1	Sell	Not Sell	

Table 1 assumes Firms H, M, and L vary on the private benefits contained in one share and have identical fundamental value. A high (low) sentiment market inflates their share value by the same amount. A high-sentiment market motivates institutional investors to sell firm L for the value inflation (1) and forgoes the private benefits (0). In contrast, the private-benefits-motivated sales will occur in none of other cases where a positive net gain does not exist.

By classifying dual-class firm ownership as low-private-benefits ownership and non-dual-class firm ownership as high-private-benefits ownership, this study tests the specification below to examine the hypothesized relationship between institutional ownership change and private benefits.

 $\Delta_{it}=\alpha+\beta_2\mathbf{X}+\beta_1(Low Sentiment Market)_t+ \beta_2 (Dual-Class Firm)_t + \beta_3 (High sentiment Market & Dual-Class$

 $Firm)_{it} + \varepsilon_{it}$

Depenedent Variable							
Ownership change (Δit)	The ownership change made by institution investors over firm i from $06/30$ of year t-1						
	to 06/30 of year t. For detailed construction, see the Data and Sample section						
Control Variables (X)							
2-year Treasure Return	2-year treasure bond yield						
Equity Market Premium	(S&P 500 return) - (2-year treasure bond yield)						
Excessive Firm Return	Residual of Fama-French three factor model.						
Fama-French HML	The HML factor in Fama-French three factor Model						
Fama-French SMB	The SMB factor in Fama-French three factor Model						
Momentum	Yearly market momentum factor from CRSP						
iquidity Yearly market liquidity innovation from Pastor and Stambaugh (2003).							
Firm size	log(share priœ*outstanding shares)						
Variables of Interest							
Low Sentiment Market	Dummy variable with 1 denoting the sentiment index (Baker and Wurgler, 2005) for						
	that year is negative and 0 otherwise						
Dual Class Firm	Dummy variable with 1 denoting the ownership change made on a dual dass firm as						
	identified by Gompers, Ishii, and Metrick (2006) and 0 otherwise.						
High sentiment Market &	Dummy variable with 1 denoting dual dass firm in high sentiment market and 0						
Dual Class Firm	otherwise.						

Table 2. Definitions of Model variables



Empirical Test

Table 3 summarizes the regression result. The significant negative coefficient of *High-Sentiment Market* & *Dual-Class Firm* in panel 1 reveals that institutional investors change their dual-class firm ownership in high-sentiment markets less than they do in other scenarios. This effect can stem from two cases. 1) Institutions sell more dual-class firm shares in a high-sentiment market, or 2) Institutions buy fewer dual-class firm shares in a high-sentiment market. The former supports the private benefits hypothesis while the latter rejects it.

Dependent Variable	1. Owners	hip Change	2. Net	t Seller	3. Net Buyer			
[Intercept]	0.264 ***	0.263 ***	0.173 ***	0.172 ***	0.008	0.008		
	[40.42]	[40.31]	[13.69]	[13.67]	[1.37]	[1.35]		
Equity Market Premium	-22.26 ***	-22.230 ***	-17.53 ***	-17.53 ***	1.907 ***	1.917 ***		
	[-49.73]	[-49.64]	[-20.52]	[-20.52]	[3.91]	[3.92]		
2-year treasury Return	-42.886 ***	-42.860 ***	-32.18 ***	-32.21 ***	2.086 *	2.097 *		
	[-41]	[-40.98]	[-15.94]	[-15.95]	[2.08]	[2.09]		
Excessive Firm Return	0.000	0.000	0.002	0.002	-0.001 .	-0.001 .		
	[0.46]	[0.37]	[1.47]	[1.42]	[-1.75]	[-1.77]		
Fama_French HML	-10.920 ***	-10.906 ***	-8.789 ***	-8.788 ***	1.19 ***	1.195 ***		
	[-51.37]	[-51.28]	[-21.82]	[-21.82]	[4.97]	[4.99]		
Fama_French SMB	-0.700 ***	-0.700 ***	-0.84 ***	-0.836 **	0.043	0.042		
	[-5.46]	[-5.46]	[-3.29]	[-3.28]	[0.49]	[0.48]		
Liquidity	-3.548 ***	-3.550 ***	-2.281 ***	-2.279 ***	-0.284 ***	-0.285 ***		
	[-37.23]	[-37.25]	[-12.23]	[-12.22]	[-3.36]	[-3.37]		
Momentum	25.877 ***	25.865 ***	19.577 ***	19.593 ***	-1.143 *	-1.147 *		
	[66.65]	[66.62]	[27.97]	[27.99]	[-2.25]	[-2.26]		
Firm Size	0.003 .	0.003 .	-0.006 *	-0.006 *	0.007 ***	0.007 ***		
	[1.73]	[1.71]	[-2.3]	[-2.32]	[6.19]	[6.2]		
Low Sentiment Market	-0.073 ***	-0.073 ***	-0.059 ***	-0.058 ***	0.01 ***	0.01 ***		
	[-23.26]	[-22.95]	[-9.41]	[-9.32]	[3.81]	[3.85]		
Dual Class Frim	-0.002	0.001	-0.006 *	-0.002	0.002	0.002		
	[-1.39]	[0.47]	[-2.45]	[-0.56]	[1.56]	[1.64]		
High Sentiment Market &		-0.006 *		-0.009 **		0.001		
Dual Class Frim		[-2.54]		[-2.69]		[0.41]		
Year Dummy	YES	YES	YES	YES	YES	YES		
R-square	0.326	0.326	0.2339	0.234	0.033	0.0326		
DF	22535	22534	9897	9896	12627	12626		

 Table 3. Regression results of ownership change by all institutions, net seller, and net buyer

The coefficient of *High-Sentiment Market & Dual-Class Firm* is significant negative in Panel 2 but is insignificant in Panel 3. This pattern supports the private benefit hypothesis. Institutional investors not only sell more dual-class firm shares in high-sentiment markets than in low-sentiment markets, but they also sell more dual-class firm shares in high-sentiment markets than they sell non-dual-class firm shares in either high or low-sentiment markets.



The effect of *High-Sentiment Market & Dual-Class Firm* should exist only for institutional investors valuing private benefits. Table 4 shows that public pension funds drive the full-sample results of institutional ownership change. The negative effect of *High-Sentiment Market & Dual-Class Firm* in Panel 2 indicates public pension funds sell more dual-class firm shares in high-sentiment markets than in the contrasting scenarios, i.e., dual-class firm shares in low-sentiment markets and non-dual-class firm shares in markets of either high or low-sentiment. In the meantime, the lack of a significant effect in Panel 3 suggests the amount of dual-class firm shares they buy in high-sentiment markets does not differ from the amounts they buy in any contrasting scenario.

Dependant Variable	1. Ow	nersl	nip Chang	e	2	. Net	Seller		3.	Net	Buyer	
[Intercept]	0.482	***	0.481	***	0.405	***	0.404	***	-0.034		-0.034	
	[17.37]		[17.35]		[8.22]		[8.2]		[-1.43]		[-1.44]	
Equity Market Premium	-41.628	***	-41.547	***	-38.713	***	-38.605	***	6.395	***	6.418	***
	[-22.42]		[-22.39]		[-11.63]		[-11.61]		[3.65]		[3.66]	
2-year treasury Return	-83.566	***	-83.593	***	-72.398	***	-72.358	***	6.072		6.081	
	[-18.76]		[-18.78]		[-9.18]		[-9.19]		[1.58]		[1.58]	
Exæssive Firm Return	-0.001		-0.001		0.002		0.002		-0.002	**	-0.002	**
	[-1.21]		[-1.31]		[0.71]		[0.61]		[-2.9]		[-2.91]	
Fama_French HML	-20.299	***	-20.259	***	-19.366	***	-19.316	***	3.662	***	3.674	***
	[-22.96]		[-22.93]		[-12.27]		[-12.26]		[4.29]		[4.3]	
Fama_French SMB	-6.835	***	-6.833	***	-5.08	***	-5.09	***	-0.699	*	-0.695	*
	[-19.33]		[-19.33]		[-8.2]		[-8.23]		[-2.29]		[-2.28]	
Liquidity	-3.021	***	-3.012	***	-1.184		-1.139		-1.815	***	-1.815	***
	[-5.89]		[-5.88]		[-1.33]		[-1.28]		[-4.85]		[-4.85]	
Momentum	48.607	***	48.586	***	43.387	***	43.443	***	-5.033	**	-5.053	**
	[31.83]		[31.84]		[16.27]		[16.31]		[-2.95]		[-2.96]	
Firm Size	0.014	***	0.014	***	0.002		0.001		0.01	**	0.01	**
	[3.52]		[3.49]		[0.3]		[0.19]		[3.24]		[3.25]	
Low Sentiment Market	-0.136	***	-0.134	***	-0.138	***	-0.135	***	0.036	***	0.036	***
	[-10.25]		[-10.13]		[-5.91]		[-5.81]		[3.49]		[3.51]	
Dual Class Frim	-0.009	**	0.000		-0.023	***	-0.004		0.004		0.005	
	[-2.83]		[0.05]		[-4.55]		[-0.5]		[1.86]		[1.85]	
High Sentiment Market &			-0.021	***			-0.038	***			0.003	
Dual Class Frim			[-4.38]				[-5.7]				[0.6]	
Year Dummy	YES		YES		YES		YES		YES		YES	
R-square	0.5864		0.587		0.5346		0.5361		0.053		0.0529	
DF	7289		7288		3369		3368		3909		3908	

Table 4. Regression results of ownership change by all public pensions, net seller, and net buyer

References

Baker, M. and J. Wurgler(2006)."Investor sentiment and the cross-section of stock returns", Journal of

Finance, VOL LXI, No.4.



- Maug, E. (1998). "Large shareholders as monitors: Is there a trade-off between liquidity and control?" Journal of Finance LIII(1).
- Romano, R. (1993). "Public pension fund activism in corporate governance reconsidered." Columbia Law Review 93(4): 795-853.
- Shleifer, A. and R. W. Vishney (1986). "Large shareholders and corporate control." Journal of Political Economy 94(3): 461-488.
- Woidtke, T. (2001). "Agents watching agents? Evidence from pension fund ownership and firm value." Journal of Financial Economics 63: 99-131.
- Zingales, L. (1994). "The value of the votng rights: A study of the Millan stock exchange experiecne." Review of Financial Studies 7(1): 125-148.
- Zingales, L. (1995). "What determines the vlaue of corporate votes." Quarterly Journal of Economics 110(4): 1047-1073.
- Zwiebel, J. (1995). "Block investment and partial benefits of corporate control." Review of Economic Studies 62(2): 161-185.



LEARNING CHINESE AS A SECOND LANGUAGE

Mei-Chih Wang University of Louisiana at Lafayette Lafayette, LA 70504-2051 <u>mwang@louisiana.edu</u>

ABSTRACT

This study investigates the effective strategies to promote Chinese literacy in second-language learners.

A case study will be presented to illustrate the significance of family involvement on second-language

literacy development.

Keywords: Chinese literacy, second-language learner

Introduction

- I. Why is "home-school working together" important?
- II. Are parents doing the right thing?
- III. Second Language Learning
- IV. Purpose of the Study (Teacher as Researcher)

Method

The participant, instruments, and procedure will be presented.

Results

The results of this study will be presented in two parts, oral language and written language.

Web Resources

http://www.mandarintools.com/worddict.html (Chinese-English Dictionary)

<u>http://a4esl.org/</u> (quizzes, tests, exercises and puzzles to help students learn second language)

http://school.discoveryeducation.com/quizcenter/quizcenter.html (a powerful tool you can use to create, administer, and grade quizzes online)



http://darkwing.uoregon.edu/~leslieob/pizzaz.html (for scribblers and teachers of English to speakers of other languages)

http://english.moe.gov.tw/ct.asp?xItem=9693&CtNode=417&mp=1 (Chinese Language Centers)

http://english.moe.gov.tw/ct.asp?xItem=9364&ctNode=424&mp=1 (online reference materials by the

Ministry of Education, R.O.C)

http://www.ncacls.org (National Council of Associations of Chinese Language Schools)

http://www.ncacls.org/ncacls_frm_materials.htm (National Council of Associations of Chinese Language Schools e-Journal)

http://www.cln.org/themes/listening.html ("Listening Theme Page" has links to internet audio resources that may be used by ESL students and teachers)

Discussion

1. How can teachers work with second-language learners? (oral / written)

2. How to help the parents who speak limited Chinese to increase parent involvement in children's

second-language learning?

3. Describe your experiences working with second-language learners and their parents/grandparents?

4. What strategies will you provide for parents/grandparents to promote children's second-language learning at home?

5. (Any other topics?)



THE SIGNIFICANCE OF LANGUAGE COMPREHENSION ON PROBLEM SOLVING

Mei-Chih Wang University of Louisiana at Lafayette Lafayette, LA 70504-2051 <u>mwang@louisiana.edu</u>

Abstract

This paper is to investigate English language learners' (ELLs) processes of thinking when they solve mathematical problems. The importance of language to learning as well as the instruction in ELLs classrooms will be addressed.

Keywords: English language learners (ELLs); Problem solving

Introduction

Vygotsky (1962) believed that language is a psychological tool. Language frees children from the constraints of their immediate environment. Language also helps children interact socially and guides their thinking. In order to foster the interaction between teachers and children, to encourage the communication among children within the mathematics community, and to effectively reach children's needs in the multicultural learning community, teachers need to clarify the importance of social context on learning mathematics, distinguish cultural differences in the language of number expression, and adopt effective instruction in mathematics classrooms. Therefore, the ELLs instruction in mathematics consists of 1) cultural differences in the language of number expression, and 3) real-life language use.

Cultural Differences in the Language of Number Expression

In the class that Flores (1997) observed and studied, many students had learned algorithms in their countries of origin. The algorithms they learned were different from the ones commonly taught in the United States. Students were encouraged to use whatever algorithm was convenient for a particular situation. They were also encouraged to compare and understand the differences. Students learned



mathematics with great appreciation of the cultures from the United States as well as the rest of the world. The structure of Asian language and English language number words influences the development of early numerical and arithmetical competencies (Geary, Bow-Thomas, Liu, & Siegler, 1996). In English and most European languages, there are irregularities of a regular named-value system on number expression. These irregularities result in serious consequences for EMS's mathematics learning in contrast to children who speak a regular named-value language. For example, English has irregularities in the words between ten and one hundred; as well, it has different modifications of *ten, teen* and *ty* that do not clearly say *ten*.

Language Comprehension

Effective mathematical instruction and assessment focus on the processes of language comprehension as well as on the mathematical aspects of word-problem solving. When young children solve arithmetic problems, they not only select possible problem-solving strategies, but also develop languagecomprehension skills. One cannot assess a young child's arithmetic problem-solving ability just in light of the child's calculation processes and results. In addition, he/she has to know how the child interprets problem statements. Wang (1999) did not investigate the exact percentage of children who were not good at mathematical problem solving in Taiwan, but she did see a few first-grade children suffering the same problem in her classroom. When she was teaching at an elementary school in Taiwan, she found some children were good at calculation (e.g., 3+2=5), but failed to solve word problems (e.g., "I have 3 boxes. My sister has 2 boxes. How many boxes do we have altogether?"). She hypothesized that a lack of language comprehension, not mathematics, resulted in the failure.

Real-life Language Use

Whitman (1999) conducted a workshop for teachers to help them make the linkage between mathematics and language. To help students learn mathematics, Whitman felt their cultural

303



backgrounds were important for them to experience relationships, characters, and settings. If students did not share and learn problem solving through real-life language, they would not successfully acquire mathematical experience in the classroom. After the workshop, teachers adopted the program in the classroom. Since these classrooms were classified as whole-language classrooms, mathematics was integrated with language as much as possible. The teachers observed and evaluated students' learning, and found that due to students' created strategies and the pictures they drew during the problem-solving processes, their mathematics achievement made a great deal of progress. Providing the familiar real-life circumstances that students are familiar with indeed enhanced the effect of students' problem solving in mathematics.

Summary

As teachers face more and more ELLs in schools, language comprehension becomes an extremely important element in the mathematics classroom. ELLs may misunderstand both new vocabulary and words with multiple meanings. A familiar context helps ELLs communicate more readily. Solutions of mathematical word problems require that children have an understanding of language and mathematics. Effective mathematical instruction and assessment focus on the processes of language comprehension as well as on the mathematical aspects of word-problem solving. Students who could correctly recall the story texts are more likely to produce correct solutions to word problems. Providing the real-life circumstances that students are familiar with indeed enhanced the effect of students' problem solving in mathematics.

References

Flores, A. (1997). Si se puede, "It can be done": Quality mathematics in more than one language. In J.
 Trentacosta, & M. J. Kenney (Eds.), *Multicultural and gender equity in the mathematics classroom* (pp. 81-91). Reston, VA: National Council of Teachers of Mathematics.



Geary, D. C., Bow-Thomas, C. C., Liu, F., & Siegler, R. S. (1996). Development of arithmetical competencies in Chinese and American children: Influence of age, language, and schooling. *Child Development*, *67*, 2022-2044.

Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: The MIT Press.

- Wang, M. (1999). From instruction to construction: Young children's mathematical thinking. Paper presented at the Seventh Annual International Conference of the Chinese American Educational Research & Development Association. In S. Peng (Ed.), *CAERDA 1999 Conference Proceedings* (pp. 6-12). Fairfax, VA.
- Whitman, N. C. (1999). Using Asian-Pacific literature to enhance problem solving in the elementary school mathematics classroom. In W. G. Secada, & C. A. Edwards (Eds.), *Changing the faces of mathematics: Perspectives on Asian Americans and Pacific Islanders* (pp. 21-26). Reston, VA: National Council of Teachers of Mathematics.



ALIGNING CAREER AND TECHNICAL EDUCATION

Ed Workman Department of Construction Management Northern Kentucky University Highland Hgts. KY 41099 workman@nku.edu

Joyce Stubbs Department of Agriculture and Human Sciences Morehead State University Morehead, KY 40351 <u>j.stubbs@moreheadstate.EDU</u>

Abstract

The issues and concerns facing Kentucky Career and Technical Teacher Education (KY CTTE), university teacher educators and state department Career and Technical Education (CTE) leaders in providing and preparing the best CTE teachers possible are not unique to Kentucky. In an effort to better understand these issues and concerns a team of state and national CTE leaders charged with planning Kentucky's annual CTE teacher education conference decided to use the conference proceedings as an avenue to stimulate discussions and gain insights on problems new and in-service teachers may be experiencing. The February, 2009, Kentucky Career and Technical Teacher Education Conference's theme "Aligning Career and Technical Education" allowed planning for a collaborative effort among Kentucky universities; the Kentucky Office of Career and Technical Education; the Kentucky Department of Education, Secondary Division of Career and Technical Education; and the National Research Center for Career and Technical Education. The conference planning process, the conference problem solving driven agenda and a manifest of the issues and concerns facing Kentucky CTE as indicated by conference participants and presenters; can provide useful information for state and national CTE leaders.

Keywords: Career and technical education, Teacher education

Aligning Career and Technical Education



Career and Technical Education (CTE) in Kentucky has seen numerous changes over the past 15 to 20 years. James A. Gregson and Jeff M. Allen (2005, 2) state that "CTE is practiced at the high school and pre-baccalaureate postsecondary level. Each had undergone changes at the end of the 20th century that have implications for CTE teachers and teacher preparation programs." The nation has also experienced many changes in CTE; the most notable would be the name change from "Vocational Education" to "Career and Technical Education". Although the name changed, many of the issues and concerns facing university CTE teacher educators and state CTE leaders did not change or go away. These changes have, however, helped to create the impetus for research. A state CTE teacher education conference was used as a mean to gather insight into dealing with the issues and concerns facing Kentucky CTE and CTTE programs.

The Conference Planning Process

The Kentucky Career and Technical Teacher Education-University Coordinating Committee (KY CTTE-UCC) is charged with guiding the direction of Kentucky university CTE teacher education programs and state CTE leadership initiatives. Its members represent universities, state department personnel, and representatives of the Kentucky Community and Technical College System (KCTCS). The annual state conference is hosted by a selected regional university or KCTCS. Northern Kentucky University CTE teacher educator, Dr. Ed Workman, chaired the 2009 conference committee. The theme "Aligning Kentucky Career and Technical Education Programs" was chosen as action driven by discussions at an October, 2008, meeting of the KY CTTE-UCC.

With the conference theme driving discussions, the KY CTTE-UCC met with Dr. Jim Stone and Dr. Donna Pearson of the National Research Center for Career and Technical Education (NRCCTE) to discuss how the 2009 KY CTTE Conference would provide an environment for open discourse on aligning Kentucky university CTE teacher education programs. It was decided to use the 2009 KY CTTE Conference as a



forum for creating an environment where Kentucky CTE teacher educators and leading Kentucky CTE administrators could gain information on state and national CTE issues and openly discuss how Kentucky could better align CTE teacher education programs. It was also decided that Kentucky should partner with the NRCCTE in planning for the possibility of Kentucky hosting a National Conference for CTE Research in the near future.

Conference Agenda/Proceedings

A mixture of presentations, panel discussions, and break-out sessions with follow-up discussions provided direction for seeking input from all conference participants. The conference was designed to be extremely participant interactive and driven. National speakers were provided to enlighten conference participants on findings from the American Association of Career and Technical Education (ACTE) and the NRCCTE. The conference agenda is Appendix A.

Stephen DeWitt, ACTE Senior Director of Public Policy, presented "CTE Teacher Quality and Support" in the early morning session of the first day's agenda. He gave an overview of President Obama's focus for education as related to teacher education. Emphasis was on recruitment and training of new and better teachers. Steve provided data resulting from an ACTE task force charged with examining issues related to CTE teacher quality and insight on defining high quality CTE teachers. His presentation provided some foundation for determining Kentucky CTE teacher issues and concerns.

Following Steve Dewitt, Jay Rojewski, University of Georgia, presented "Conceptual Frameworks for CTE Teacher Education". He encouraged the group to seek alternative philosophies for CTE. Fewer CTE teacher education programs, less CTE teacher educators as leaders and discussions needed for alternative CTE teacher education programs were presented as CTE concerns. Jay assured the group that a continual assessment of CTE and its mission will be needed to provide future CTE teachers.



Following Steve Dewitt and Jay Rojewski, Jim Stone, NRCCTE, facilitated a follow-up session charging participants to break out into groups in order to openly discuss the information provided by previous speakers. The groups were to prepare a list of Kentucky's CTE teacher education issues and concerns. Each group was diversified by program area in order to assure most teacher education programs were represented. As a result of the group breakout sessions and a final Friday morning open forum on the last day of the conference, the following issues and concerns were decided as the major opportunities for the organization to consider.

Manifest of the Issues and Concerns

Relevance of CTE Teacher Education Curriculum

How relevant are KY CTTE programs? Are they meeting CTE teacher needs? Kentucky CTE teachers are usually classified as pre-service or in-service. Final discussions called for a review of CTTE programs for relevance to teacher needs using national and state teacher education standards, academic and CTE, as program adequacy indicators.

Aligning KY CTTE programs

Lack of alignment across KY in CTE disciplines and across disciplines for pre-service and in-service CTE teachers has become more of an issue in Kentucky due primarily to combining programs such as agriculture education, business education, occupational education, and possibly technology education under one program to provide services to ever smaller groups of teachers. Each group of teacher educators tends to protect their own pedagogical ideas and methods. Coupling this with different programs from university to university within the state creates a caveat of means to meet teacher needs for classroom planning, organization and presentation. For example Business Education methodology is often quite different than Agricultural Education. It was also obvious from small and large group discussions that the larger the number of students in a program the less the teacher educator felt the



need to align programs. Programs where adequate student numbers are enjoyed feel less need to change. It was a consensus, however, that in the future all CTE teacher education programs could profit from a continuing curriculum alignment. It was also a consensus that students would be much better served by a state-wide CTE curriculum addressing Kentucky and national standards.

CTE Image/Identity

There was much discussion concerning the image/identity problem facing KY CTE programs. Participants felt that there needed to be research on how CTE programs were being perceived by all constituents. Are good students seeking CTE programs and if so are they being allowed to pursue CTE programs by counselors, teachers, administrators and even parents? Many KY CTE programs may be eliminated in the near future due to low student numbers and budget constraints. The high cost of CTE programs is more frequently making them targets of budget cuts and even program cuts.

Evidence of increasing percentages of Individual Education Plans (IEPs), by conference participants' perceptions at least, was a major concern for teacher educators. Pre-service and in-service teachers alike are requesting teacher educators to provide more tools for dealing with the special needs of IEP students.

Integration of CTE and academics

Are CTE teachers provided with tools to integrate their teaching activities with academic teachers? Kentucky has offered Integration of CTE and academic workshops since the beginnings of Kentucky Tech Prep implementation. Participants suggested CTE teacher education programs provide teachers with more tools to integrate curriculum, align CTE programs with academic content, gain academic credit for technical content and remove barriers between professional arenas. It must be noted that after nearly 20 years of Kentucky Tech Prep, this problem was still felt by participants to be a major issue.

Need for Teacher Education Leadership



Participants expressed the need to better prepare teachers for leadership positions. CTTE programs need to put more emphasis on leadership skills, group dynamics and administrative capabilities. Additionally developing CTE teachers as policy makers/leaders outside of CTE is essential in providing a full teacher education program. Stressing the importance of professional membership and participation should be ingrained in CTTE programs.

CTE Teacher Prepared to be Student Organization Advisors

Participants also expressed the need to embed skills dealing with student organizations in in-service and pre-service programs as well as the need to emphasize more active experiences for teachers already in the teaching arena. Pre-service programs should create a means to allow experiences for students to learn more about student organizations, to better embrace the need for teacher participation in them and to have skills in meeting the needs of student organizations. Participants expressed a concern that CTE teachers were not well versed in sponsoring student organizations. It was suggested that CTE teachers be given opportunities to sponsor student activities during their teacher education programs. Instruction for planning, organizing and managing student organizations could encompass a stand-alone class in CTTE programs.

CTE Teacher's Education Requirements

A major topic of discussion, brought on somewhat due to the conference presentation by Steve Dewitt of ACTE, was CTE teacher education requirements. Steve suggested national initiatives were driving the needs for higher levels of education for all CTE teachers. He presented the case for Kentucky possible reviewing its CTE teacher certification legislation. The group felt that this topic should at least be one for further study in Kentucky.

Participant overall consensus indicated in-service Occupational based CTE Teachers should pursue a B.S. degree within ten years. Many teacher educators expressed the need for more course content beyond



just an Associate degree or 64 Hour Planned Occupational based CTE Teacher Curriculum was needed. Presently a 64 Hour planned Occupational based CTE Teacher Curriculum approved by the Kentucky Education Professional Standards Board along with three years Occupational based CTE Teacher teaching experience is required for Occupational based CTE teacher certification.

CTE Recruitment and Retention/Teacher Shortage

Participants were made aware by state administrators that Kentucky has teacher shortages in some program areas. High teacher turnover was also indicated. Many factors were discussed which might cause less teacher recruitment and retention. Shortages were thought to be due to salary, stress on the job, lack of student interest, and negative student behavior. Participants felt teacher shortages could be improved by putting a stronger emphasis on national, state and local recruitment.

Many of the issues above are discussed in *The History and Growth of Career and Technical Education in America* (Gordon, 2008). This work suggests that the issues are national issues not issues unique to Kentucky.

Conclusion

In conclusion, the aforementioned issues and concerns for Kentucky CTTE and CTE programs were considered by the 2009 KY CTTE conference participants to be the most important facing Kentucky CTE. It was felt that further study of these issues and actions to be taken should be directed through the KY CTTE organization. It was a consensus of all participants that the issues brought forth during the group breakout sessions and further defined during the "What Have We Learned" conference session merit further discussions. It was concluded that future conference proceedings should provide avenues for addressing these issues.

Appendix

2009 Kentucky Career and Technical Teacher Education Conference CONFERENCE AGENDA



Thursday, February 5, 2009

8:45 a.m. – 9:15 a.m.	Conference Registration (Thomas L King Leadership Center) Continental Breakfast						
9:15 a.m. – 9:30 a.m.	Welcome and speaker/panel introductions						
9:30 a.m. – 10:15 a.m.	"CTE Teacher Quality and Support"						
	Steve DeWitt, ACTE						
10:15 a.m. – 11:00 a.m.	"Conceptual Frameworks for CTE Teacher Education"						
	Jay Rojewski, University of Georgia						
11:00 a.m. – 11:15 a.m.	Break						
11:15 – 12:00	Panel with Q&A from audience, Dr. Jim Stone facilitator						
12:00 p.m. – 12:30 p.m.	Lunch						
12:30 p.m. – 1:00 p.m.	"The Role of Program Assessment in Aligning Kentucky CTE Programs." Myra Helphinstine, Wayne C. King, Dr. Larry Helphinstine						
1:00 p.m. – 2:45:00 p.m.	Focus on Kentucky Issues						
2:45 p.m. – 3:00 p.m.	Break						
3:00 p.m. – 4:00 p.m.	"What Have We Learned"						
	Dr. Jim Stone, NRCCTE						
4:00 p.m. – 5:00 p.m.	Discipline Specific Break-Out Sessions						
	Agricultural Education Business Education						
	Family and Consumer Sciences Education						
	Industry/Technical Education						
Friday, February 6, 2009							
8:00 a.m. – 8:10 a.m.	Opening remarks						
8:15 a.m. – 8:55 a.m.	"Video Podcasting and Its Impact on Student Achievement"						
	Steve Stubbs, Newport H S and Dr. Joyce Stubbs, Morehead						
	State University						
8:55 a.m. – 9:35 a.m.	"Aligning Kentucky Career and Technical Education Programs:						
	The Hard Facts about Soft Skills"						
	Dr. Donna R. Everett, Morehead State University						
9:35 a.m. – 10:15 a.m.	Teacher Certification Update						
	Dr. Robert Brown, Kentucky EPSB						
10:15 a.m. – 10:30 a.m.	KCATE Update						
	Mike Stone, Kentucky ACTE						
10:30 a.m. – 10:40 a.m.	Break						
10:40 a.m. – 11:30 a.m.	"Future of Kentucky Career and Technical Education/Issues and						
	Concerns", Forum						
	Dr. Ed Workman and Dr. Jack McElroy, facilitators						
11:30 a.m. – 12:30 p.m.	Concluding Luncheon						

References

- DeWitt, S. (2009, February). *CTE Teacher Quality and Support*. Invited presentation at the Kentucky Career and Technical Teacher Educators Conference, Georgetown, KY.
- Gordon, H. R.D. (2008). *The History and Growth of Career and Technical Education in America*. Long Grove, IL: Waveland Press, Inc.
- Gregson, J. A. and Allen, J. M. (2005). *Leadership in Career and Technical Education Beginning the 21st Century.* Columbus, OH: University Council for Workforce and Human Resource Education.
- Rojewski, J. W. (2009, February). A conceptual framework for CTE teacher education: Implications for teacher training programs. Invited presentation at the Kentucky Career and Technical Teacher Educators Conference, Georgetown, KY.



ANALYTIC MODELS FOR STRATEGIC PLANNING: A CASE STUDY

Dianne Wright Florida Atlantic University-Davie Campus Davie, FL 33314 <u>dwright@fau.edu</u>

Stanford Ford Florida Atlantic University-Boca Raton Campus Boca Raton, FL 33431 <u>sseford@fau.edu</u>

Abstract

The researchers examine various models of strategic planning including those used in both corporate and various higher education settings. It was found that the precise methods of decision making regarding strategic planning process implementation often varies from one institution to another. I.E., to date, there is no "one best way" to implement a strategic planning process. However, there are elements common to all successful ventures in strategic planning that must be considered if one is to be successful in the strategic planning process. As such, for purposes of this paper, several strategic planning frameworks were combined, including the above as well as Bolman and Deal's (2003) structural, human resource, political and symbolic frames to form a conceptual basis for this study in the form of researcher developed analytic framework, to examine the strategic planning process in higher education, and to answer questions of the extent to which the strategic planning process in the selected higher education case study institution is similar to and different from corporate strategic planning as well as and to test the 'goodness of fit" of the several models found in the literature.

Keywords: Case study; Strategic planning; Models

315



THE INFLUENCES OF EMOTIONAL AND SOCIAL BEHAVIORS ON RETAIL INTERNSHIP EXPERIENCES

Jun Xu Department of Marketing DePaul University Chicago, IL jxu11@depaul.edu

Yongmei Liu Department of Management University of Texas at Arlington Arlington, TX 76019 <u>ymeiliu@uta.edu</u>

Barton A. Weitz Department of Marketing Warrington College of Business University of Florida Gainesville, FL, 32611 <u>bart.weitz@notes.cba.ufl.edu</u>

Abstract

Corporate America invests considerable resources in coordinating and managing internship programs, and relies heavily on internship programs to recruit entry-level employees (DiLorenzo-Aiss & Mathisen, 1996; Zawel, 2005; Pianko, 1996). Internships play a particularly important role in the human resource management programs of retail firms. The need for management talent in retailing is increasing as retailing evolves into a global, high-technology industry. However, retailers face significant challenges in recruiting college students because of the common perception that, in retailing, hours are long, pay is low, and work is menial (Levy and Weitz, 2003; Swinyard, 1981; Swinyard, Langrehr, and Smith, 1991). Thus, retailers frequently use internships to expose college students, their potential management trainees, to the many challenging and rewarding management career opportunities in retailing. An internship serves the purpose of providing a realistic job preview, which holds the potential of changing the future management trainee's perceptions of retailing as a career. In addition, internships enable retailers to assess the potential of student interns and thereby make better hiring decisions.



Internships also provide benefits to the students. As the job market becomes increasingly competitive, internships have become an essential experience for college students to find desirable jobs. It is estimated that more than 80% of graduating college seniors have completed at least one internship (Zawel, 2005). Successful internship experiences not only enhance students' job-related skills, but also ease their role transition from student to employee and, thus, increase their opportunities to be hired immediately after graduation (Taylor, 1985, 1988; Gault, Regington, and Schlager, 2000; Hite and Belizzi, 1986; Knouse, Tanner, Harris, 1999). Students with prior internship experiences also achieve greater early-career success than others (Gault et al., 2000).

Given the significance of internships for both sponsoring retailers and interns, it is important to examine factors influencing positive internship experiences – factors that support the human resource management practices of retail firms and facilitate interns' personal experiences and career development. However, to date, academic scrutiny on internship experiences has been limited (Feldman and Weitz, 1990; Gault et al., 2000). Most of the existing research has focused on assessing the impact of internships on subsequent performance and the effects of the internship design element on the internship experience.

In this study, we address the gap in the literature by examining the role of interns' emotional and social activities on their internship experiences. We propose that interns' emotional behaviors (i.e., emotional masking, emotional sharing, and strategic emotional display) and social activities at work influence the amount of learning gained and mentoring received during an internship, which further determine the extent to which interns have satisfactory experiences, are committed to their internship sponsors, and have positive attitudes toward retailing as a future career.

Data collected at two points of time during the internship program reveal that mentoring received is positively related to interns' emotional sharing, strategic emotional display, and social activities, but

317



unrelated to emotional masking. Self-reported learning is positively related to emotional sharing but negatively related to emotional masking. Overall, learning and mentoring are positively related to internship outcomes. Our findings suggest that interns' emotional and social behaviors play important roles in shaping their internship experiences and in substantiating potential benefits gained from internship programs for both interns and the sponsoring retailers.

Keywords: Internship, Emotion, Learning, Mentoring, Retailing



WORKSHOP: WEB 2.0: GRATIS ONLINE TOOLS WITH ENDLESS POSSIBILITIES

Cynthia A. Green Department of Education William Jewell College Liberty, MO 64068 greenc@william.jewell.edu

Abstract

The plethora of gratis online tools found on Web 2.0 provides resources to improve efficiency by surpassing the constraints of previous options. Web sites are available to facilitate interactive information sharing, interoperability, user-centered design, and collaboration online in real time with a virtual community. Web 2.0 websites include social-networking sites, blogs, wikis, web applications (webmail, online retail sales, online auctions), video-sharing sites, storage sites, and collaborative tagging. Participants in this workshop will be shown sites with educational applications, and encourage to bookmark sites on their laptops for future use.

Keywords: Web 2.0 tools, Online, Collaborative, Networking

Introduction

"Students, put your computers away so we can begin class." A metropolitan school district in the midwest received funding in fall 2009 to purchase a net book for every high school student. Teachers, inadequately trained and not feeling comfortable integrating computers into the classroom, began each class with this sad mantra. However, computers can be use as a learning tool to support the curriculum, and the tools are available now. Web 2.0 tools provide endless options to bring authentic computer activities into the school, and the students' skills into the twenty-first century.

The US Department of Education (2004) alerted the nation, "We have not realized the promise of technology in education." The serious underuse of the technological opportunities for education was



attributed to placing computers in schools without providing adequate training for "its endless possibilities for enriching the learning experience" (p. 10).

The Partnership's 2004 report *Learning for the 21st Century* stated, "Today's education system faces irrelevance unless we bridge the gap between how students live and how they learn" (p. 5). New graduates entering the workforce today have never known a time when computers did not exist. Web 2.0 tools are a necessity for beyond-school life. So it remains that schools must revitalize the curriculum to integrate the use of Web 2.0 tools to support and extend learning, not just entertain. If schools are to prepare our students for meaningful lives and gainful employment in the twenty-first century, education must re-think the outcomes of an education. Instead of succumbing to the mentality of "how much" we teach the students, focus must shift to "how" we teach cognition skills to embrace the digital world of the future.

Information and Communication Technology (ICT) is currently available, without cost, ready to propel students into the twenty-first century. Web 1.0 was developed as a repository of knowledge, or a silo, that students could search to find information primarily on web pages designed by web designers. User interactivity was limited to emails. Expensive software had to be purchased, installed, and regularly updated. Web 2.0 has democratized the use of the internet by providing platforms without cost and allowing users add the content. The open applications with rights granted to use the content in new and exciting contexts enables and encourage participation. "Content is created, shared, remixed, repurposed, along," Downes (2006), Senior Research Officer and passed stated eLearning, National Research Council of Canada, Institute for Information Technology. Alexander (2006), director for research at National Institute for Technology and Liberal Education (NITLE) expanded the attributes by stating, "It can be saved, summarize, addressed, copied, quoted, and built into new projects." In essence, participants become citizen journalists, global disc jockeys, and virtual video



stores. Students engage actively to learn, collaborate on meaningful subjects, create new products to share knowledge, integrate knowledge and skills from numerous sources, and evaluate their intellectual growth by their ability to produce their desired results.

Technology has powerful tools to impact every student population. Lovely (2009) asserted that all learners, especially those that struggle, "need high-speed access" to "animation and graphics and sound."

Ohler (2009) recognized that implementation of technology is not an automatic. Analyzing the basic qualities of technology that correspond with current curriculum and the needs of the teachers to become comfortable using technology in the classroom as an integral, natural part of learning, he addressed first the teachers' personal knowledge of the digital world.

1. "Experiment fearlessly" (Ohler, 2009, p. 29), with an array of technologies to determine which can be integrated meaningfully into teaching and learning opportunities.

2. Participate in social networking professional environments to develop a global voice, stay current in social issues of concern, and gain ease and expertise in using the platform.

Merging the current curriculum with digital platforms and obtaining requisite supportive technological skills requires the blending of old and new knowledge.

1. Clear and concise writing becomes one with visually appealing formats.

2. Artistic graphic qualities that capture attention extend the meaning of the text.

3. Research writing and storytelling blend to produce interesting, informative communication.

4. Sensitivity to social issues progresses into digital citizenship.

The potential of each category of application and each tool in Web 2.0 is limited only by the imagination, creativity, and pioneering spirit of the classroom teacher. Hadad and Draxler identified five stages of ICT use in classrooms. The novice user begins by being responsible for the material and the use of the



technology which results primarily in presentation. As confidence grows, the educator begins to demonstrate specific technology activities to the students. Following the demonstration, students use the specific online activities, typically as drill and practice. Eventually, the educator realizes the students' enthusiasm for ICT learning and their skills brought from home, and steps back to allow the students to begin interacting directly. Finally realizing that the students want to be involved in authentic learning about real social issues, taking their curriculum much farther than the limitations of the text, the teacher begins to work with the students as a collaborator. Here technology is a means to the end of learning. Learning new tools occurs as students need to know how to perform an unfamiliar task. Students seek necessary tools to resolve their problem by reaching out to their social network online. Excitement builds as the students return to their project knowing and implementing the necessary tool and sharing their newly acquired knowledge within real and virtual social networks.

Categorical Examples of Web 2.0 Applications

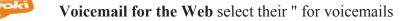
VOICethread Audiovisual tool uploads images or video files and add audio or text comments



CREATE A GRAPH Graph Design teaches graphing fundamentals

Glogster DU Personal Web Pages are "interactive posters" with media links, sound, and video capabilities.

Text to Speech Generator reads aloud.



- vackpack Voice and Video Calling Globally replaces phones and adds video
- Wikis interactive knowledge creation
- **Teacher Resources** has articles, tutorials, lesson ideas



technology

SurveyMonkey.com Surveys, Polls, and Tests writing, administering, and tabulating

Demandary Collaborative Writing on Etherpad technology and walls Wallwisher

PREZI Presentations Online add creative dimensions and store materials for accessibility

GPS Geocaching provides ordinates for treasure hunts

Word Clouds giving shape to key words

ts Tagxedo

Collaborative etherpoads applications are available as on Google.docs, Pirate Pad, and Titan Pad, each with unique capabilities. Google.docs, a trusted company, makes group work on this site feel secure. The open source documents for Microsoft Office, Open Office, are available with the same behaviors as the prototype. It can be used for a variety of projects: word processing, spreadsheet, and presentation (PowerPoint). Pirate Pad and Titan Pad both open without downloading. Pirate Pad has the lines numbered to accommodate finding exact locations to edit. In both applications each author's work is highlighted in a different color to assist in identifying which participant is contributing. When saved documents are re-opened, the words appear on the screen one-at-a-time, as if they were being type. Struggling readers who dictated a story would receive reading assistance by re-read it as the words appear. It could also be used to increase reading fluency. All three may remain privately owned or shared with specific friends whose email addresses are entered into the site.

Collaborative story writing at Storybird.com allows participant in remote locations a chance to collaborate with a pen pal or a relative in a distant location using picture gallery, if desired. Sample books are available.



Assemblive.com, an online web conferencing application, allows participations without the expense and inconvenience of travel. Using the webcam and a microphone, participants see and speak with group members in real time. Students can conference with experts and peers globally.

The assembly line has broken; not every student will leave the classroom having identical information. The curriculum is diversified by depth of interests, ability to make information available, synthesis of information into new and unique formats, and contribution of work by networks and team members.

The teacher's role of knowledge giver has evolved into leader, guiding students to problem solve, think critically, and become contributors to the growing body of knowledge. There exists a partnership in learning.

The challenge to educators is to analyze the goal of current ICT use in the classroom. Is the goal computer literacy, reinforcement of curriculum, or scaffolding the curriculum? It is paramount that educators work through professional social networks to design learning activities that push the limits of current knowledge, and prepares the students for life in the twenty-first century.

References

Framework for 21st century learning. (2004). *Partnership for 21st century skills*. Retrieved from <u>http://www.p21.org/</u> Freedman, T. (ed.). The amazing web 2.0 projects book. Eugene, OR: ICTE in Education, The Educational Technology

Site. Retrieved from http://www.ictineducation.org/web2/

Haddad, W. D. & Drexler, A. (2002), "The dynamics of technologies for education," in Haddad, W. & Drexler, A. (Eds.) *Technologies for Education: Potentials, Parameters, and Prospects.* Washington DC: Academy for Educational Development and Paris: UNESCO.

McLoughlin, C. & Lee, M.J.W. (2007). Social software and participatory learning: Extending pedagogical choices with technology affordances in the Web 2.0 era. Retrieved from

http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdf



Ohler, J. (2009). Orchestrating the media collage. The Best of Educational Leadership, p. 26-31.

One hundred helpful tools for every kind of learner. (2008, June 10). College @ Home. Retrieved from

http://www.collegeathome.com/blog/2008/06/10/100-helpful-web-tools-for-every-kind-of-learner/

McBeath (Eds.), ICT: Providing choices for learners and learning. Proceedings of the 24th ASCILITE Conference (pp.

664–675). December 2–5. Retrieved from

http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdfSingapore

Peachey, N. (2009, Sept. 09). Web 2.0 tools for teachers. Retrieved from

http://www.scribd.com/doc/19576895/Web-20-Tools-for-Teachers

Richmond, R. (2002, Oct) Integration of technology in the classroom: An instructional perspective. SSTA Research

Centre Report #97-02. Retrieved from http://www.ssta.sk.ca/research/technology/97-

02.htm#BIBLIOGRAPHY

Richardson, W. (2009). Footprints in the digital age. *The Best of Educational Leadership*, 13-16.

Riedel, C. (2009) Top 10 web 2.0 tools for young learners. THE Journal. Retrieved from

http://thejournal.com/Articles/2009/02/02/Top-10-Web-20-Tools-for-Young-Learners.aspx?Page=1

Summerford, S. (2010, June 18). Web 2.0 for teachers. Retrieved from

http://www.kn.pacbell.com/wired/fil/pages/listweb20s.html

United States Department of Education, (2004) "Toward a new golden age in American education: How the internet, the law and today's students are revolutionizing expectations." *National Technology Plan, 2004.* Jessup, MD. Retrieved from <u>http://www2.ed.gov/about/offices/list/os/technology/plan/2004/plan.pdf</u>

Vacca, R. & Vacca, J. A. (2008) "Learning with electronic texts," *Content reading: Literacy and learning across the curriculum*. Boston: Pearson.



WORKSHOP: SPORT MARKETING

Margaret Ann Mi College of Business University of Mary Washington Fredericksburg, VA 22401 <u>mmi@umw.edu</u>

Abstract

This workshop is an application exercise for educators who may be interested in teaching a sports marketing course. Participants will emulate the team, term project components that I require of my students. These components include developing a marketing strategy and implementing marketing plans for a new sport team. Workshop participants will act as marketing consulting teams for the new sport teams.

Teams have to decide on a city in which to locate that currently does not have a major league, baseball team. Completion of this portion of the project requires thorough research about the city, its transportation infrastructure, per capita income, ethnic composition, venue (new or current), and parking possibilities. I have selected Nashville, Tennessee, for the city because it does not have a major baseball team.

Consulting teams will 1) recruit players and coaches and list their salaries; 2) select a stadium; and 3) create team names, logos, colors, mascot, licensed and branded merchandise, ticket and merchandise pricing, special promotions with charities, sponsorships, public relations, electronic media use, etc.

Finally, teams will present their new team to the other teams.

Keywords: Marketing, Application, Teams, Exercise, Sports

BACKGROUND OF EXERCISE CREATION

I created the following exercises for my *Sports Marketing* course to give students an interesting experience in applying marketing concepts to sports. The basis of these exercises stems from two

326



textbooks that I have used in teaching the course. My first experience was with *Sport Marketing*, 3rd edition, by Mullin, Hardy, Anthony and Sutton. After meeting Sam Fullerton at a conference, I switched to his book, *Sports Marketing*, 2nd edition, because it was more academically oriented. Having students use both books in the course would be ideal. The Mullin's book describes the history and evolution of sports marketing in detail whereas the Fullerton book relates general marketing terms to the sports marketing concept and has a traditional textbook format.

EXERCISE ONE: Segment Profile and Product Presentation Guidelines:

- 1. One target market: define by demographics, psychographics and geographics
- 2. City: Nashville, Tennessee
- 3. Team name:
- 4. Logo:
- 5. Mascot:
- 6. Branded Merchandise:
- 7. Licensed Merchandise:
- 8. Venue Sponsor:
- 9. Players:
- 10. Coaches:

EXERCISE TWO: Place (Distribution) Presentation Guidelines:

Sport events are unique because they are produced and consumed at the same time.

- FACILITY (select options)
- Stadium, field, arena, etc.:
- Shared or multipurpose:
- Highway drive time:



- Public transportation:
- Parking (1 spot for 3.3 people):
- TICKETS (select options)
- 1) Box Office: purchase and will call window
- Phone Orders: delivery via regular mail, express, mobile phones via codes, service fees, some toll-free numbers
- 3) Authorized Ticket Retailers and Brokers: order processing and convenience fees
- 4) Web site: ticket link, bar code printed ticket
- 5) E-mail Transfer (season ticket holders): fill bought seat, void regular ticket
- 6) Secondary Ticket Market: league sells blocks of tickets held back thru 3rd party
- 7) Payroll Deduction: selected companies
- MEDIA (select options)
- 1) TV, free or pay through cable
- 2) Radio
- 3) Internet
- 4) Mobile communication devises
- 5) Smart watches
- 6) Movie Theaters
- VENUE CONCESSIONS (Food, Souvenirs)
- OFF-VENUE RETAIL SITES (Branded Team Products)

EXERCISE THREE: Promotion Presentation Guidelines:



The sport property owns the promotion rights and sells them to the media. Then the media sell ads to cover their costs. Advertisers buy ads to reach customers through commercials during broadcast and virtual signage. Develop two of the following promotion types thoroughly for your presentation:

- 1) Theme
- 2) Giveaways
- 3) Product sampling
- 4) Open house
- 5) Coupons
- 6) Bundling
- 7) Contests and sweepstakes
- 8) Premiums and redemptions
- 9) Street promotions

EXERCISE FOUR: Public Relations (include in Promotion section of presentation)

Create a crisis involving a team player and how your team would address the media.

EXERCISE FIVE: Public Relations (include in Promotion section of presentation)

Develop a community relations project for your team.

EXERCISE SIX: Price Presentation Guidelines:

Ticket purchases can be influenced by having a winning team or star player, a move to a new stadium and even the weather. Costs are generally a team's payroll, including individual player appearance fees. There are many substitutes that compete for tickets, including non-sporting events. Price the following for your team:

- 1) Hard or soft goods (equipment or apparel)
- 2) Tickets



- Seating Tiers
- Season
- Partial Season
- Cross-Promotion (soda can, candy wrapper, etc.)
- 3) Concessions (food, novelties)
- 4) Information (magazine, cable subscriptions)
- 5) Sponsorship (entitlement space, signage, banner ads)

EXERCISE SEVEN: Fan Cost Index Bundling Strategy (include in Price section of presentation)

Calculate the original total price and the bundling price for a family of four to attend a game. Include:

- 4 average tickets (2 adults & 2 kids)
- 4 small soft drinks
- 2 small beers
- 4 hot dogs
- 2 programs
- Parking for one car
- 2 adult-sized souvenir caps





Call for Paper

American Journal of Educational Studies

Interim Editor:

Dr. Alireza Lari

American Institute of Higher Education Cary, North Carolina, USA

Paper Submission

Aims & Scope:

Authors are encouraged to submit highquality, original work that has neither appeared in, nor is under consideration by, other journals.

Manuscripts should be submitted to <u>AJES@amhighed.com</u>

All the manuscripts should follow the APA Style in MS Word and not exceed 20 double-spaced pages.

There is a charge of \$200 (per paper) publication fee for all the manuscripts accepted for publication (only if accepted).

American Journal of Educational Studies is a publication of AmHighEd, the American Institute of Higher Education. The Journal publishes original theory, conceptual development, and empirical quantitative and qualitative research in all areas related to technical, vocational and academic education, with a particular focus on STEMbased post secondary education, business, and community college education. Manuscripts with international content or relevance are especially welcome.

This Journal in indexed in the 9th Edition of the Cabell's Directory of Publishing Opportunities in Educational Psychology and Administration, and Educational Curriculum and Methods. It is also indexed in ProQuest and EBSCO databases





Call for Papers

American Journal of Business Research

Editor-in-Chief:

Dr. Alireza Lari, American Institute of Higher Educatgion

Cary, North Carolina, USA

Paper Submission

Aims & Scope

Authors are encouraged to submit highquality, original work that has neither appeared in nor is under consideration by other journals.

Manuscripts should be submitted to AJBR@amhighed.com

All manuscripts should follow the APA Style in MS Word and not exceed 20 double-spaced pages.

There is a charge of \$200 (per paper) publication fee for all the accepted manuscripts for publication (only if accepted). The American Journal of Business Research is a publication of AmHighEd, the American Institute of Higher Education. The Journal publishes original theory, conceptual development, and empirical quantitative and qualitative research in areas such as supply chain management, quality management, marketing, economics, econometrics, management information systems, information technology, decision support systems, project management, process management, group and individual behavior, health care management, quantitative methods, operations management, operations research, systems development, social and cultural issues in organizations, ethical issues in business, Manuscripts with international content or relevance are especially welcome.

This Journal is indexed in the 11th Edition of the Cabell's Directory of Publishing Opportunities in Accounting, Management, Marketing, Economics and Finance, and in ProQuest, and EBSCO databases