
Developing Entrepreneurial Competencies in the Healthcare Management Undergraduate Classroom

LOUIS RUBINO, PhD, FACHE AND BRENDA FRESHMAN, PhD

ABSTRACT

Recently, entrepreneurial behavior is becoming more accepted in the healthcare field. This article describes an attempt to foster development of positive entrepreneurial competencies in the undergraduate health administration classroom. Through a literature review on entrepreneurs, eight competency clusters are identified; decision making, strategic thinking, risk taking, confidence building, communicating ideas, motivating team members, tolerance of ambiguity, and internal locus of control. These clusters are used to promote entrepreneurial skills for students through identified learning-centered activities and supplement an instructional style that facilitates thoughtful reflection.

INTRODUCTION

Healthcare in the 21st Century is chaotic. Events are changing so rapidly that executives struggle to keep up. As managers and leaders try to adapt, survive, and succeed in this turbulent environment, the need for new competencies has emerged. Proficiencies associated with "entrepreneurship," such as decision making, innovation, risk-taking, and communicating vision are coming to the forefront as key talents for healthcare professionals. Even the hit show "The Apprentice" has brought this to America's pop culture, sparking discussion in college business programs and on various websites regarding the entrepre-

Please address correspondence to: Louis Rubino, PhD, FACHE, Associate Professor, Health Administration Program, California State University - Northridge, Health Sciences Department, 18111 Nordhoff Street, Northridge, CA 91330, 818-677-7257, 818-788-7662, lrubino@earthlink.net

neurial activities of Kwame, Bill, and the rest of the "applicants" (Mascaro 2004).

In response to the industry's recent call for enhancing entrepreneurial activity in health services as a way of providing new solutions to current challenges (O'Connor and Fiol 2002; Kowalski and Campbell 2000), this article explores development of competency clusters and training methodologies applicable to the undergraduate health administration classroom. First, the call for more entrepreneurial behavior from healthcare professionals is identified. Second, definitions and examples of entrepreneurial traits and tendencies are reviewed in both professional and academic literature sources. Out of this review, competency clusters are identified. Learning-centered activities are suggested to develop these competencies in health administration undergraduate students.

Physicians have historically been the entrepreneurs of the healthcare industry (Tuohy 1999). But certain healthcare managers have had to learn on the job to be more entrepreneurial due to pressures from multiple sources. Examples can be found in the growing entrepreneurial attitudes of academe. (Rubin and Lindeman 2002). Consider the academic healthcare director who must not only manage the business at hand but also be concerned about research dollars, scientific inquiry, and teaching. Many projects must be handled simultaneously in creative and innovative ways while maintaining a balance between marketplace economics and academic missions.

A recent study looked at the work roles categorized by Mintzberg (1973) and showed that top academic health center managers utilize the entrepreneur work role (along with liaison, monitor, and resource allocator) as they implement strategies to enhance the viability of their organizations (Guo 2002). Or look at the administrator of a surgical center who must control managed care risk (Pyenson 1998) or a boutique medical practice manager who must use his/her talents to attract new customers and to keep the business in the black (Carey 2002). The healthcare industry has changed so much that administrators are encouraged to manage and lead their organizations in a very different manner. No longer can they rely on traditional methods. Today's healthcare managers are required to think outside the box.

Entrepreneurship opportunities have sprouted up in various healthcare related businesses such as cryogenics for sperm banking, temporary nursing agencies, and the manufacture of examination gloves (Bloom 1991). It is also apparent in the hospitality industry with restaurants and hotel management (Morrison and Thomas 1999). Yet, entrepreneurship as a style of management and leadership has not been fully accepted by the traditional provider based healthcare businesses. Hays (2000) believes that healthcare has adopted the

language of information-based 21st century entrepreneurs but has not demonstrated it into business processes. Healthcare is now considered ripe for entrepreneurs to radically change the current paradigm and address the challenges of the industry (Wong 1999).

Responding to the growing need for increasing the entrepreneurial efficiencies of industry leaders, the authors investigate training methods in the classroom setting that could facilitate this development. Entrepreneurial values and skills can be promoted in the traditional education of healthcare professionals (Gracie 2000). Some have made the case that currently graduate programs in health administration do not have separate courses in entrepreneurship and there seems to be a lack of awareness of the entrepreneurial role and skills among health administration graduates (Williams, Duncan and Ginter 2005). A call is made to integrate entrepreneurship into and across the health administration curriculum. We believe this can begin at the undergraduate level.

COMPETENCY CLUSTERS

The first task in facilitating professional development in the classroom is to formulate an operational definition for entrepreneurial skills. And here is where our challenge grows, as there is not one clear set of entrepreneurial skills to which we can point. The term “entrepreneur” brings up a broad spectrum of images. From Bill Gates of Microsoft to Mrs. Fields of cookie fame, most of these images involve the entrepreneur who starts a business and carries it to success. Research conducted at the Harvard University Graduate School of Business Administration on successful entrepreneurs indicates that there is “no ideal entrepreneurial profile either: successful founders can be gregarious or taciturn, analytical or intuitive, good or terrible with details, risk averse or thrill seeking...” (Bhide 1994). Furthermore, many of the key behaviors observed in company founders are now being called for in organizational employees, sometimes referred to as “intrapreneurship” (Simpson 1997).

Definitions for entrepreneurs often mention a variety of these critical skills or competency clusters. For example, Webster (2002) defines an entrepreneur as “one who organizes, operates, and assumes risk in a business venture in expectation of gaining the profit.” Peter Drucker points to a specific cluster of innovation in the following statements:

“What all the successful entrepreneurs I have met have in common is not a certain kind of personality but a commitment to the systematic practice of innovation. Today, much confusion exists about the proper definition of entrepreneurship. The term refers not to an enterprise’s size or age but to a certain kind of activity. At the heart of that activity is innovation — the effort

to create purposeful, focused change in an enterprise's economic or social potential" (Drucker 1985).

In the healthcare setting, Gerri Lamb, PhD, RN, FAAN, senior corporate director for community services for the Carondelet Health Network based in Tucson, Arizona, suggests a cluster consisting of the recognition and response to opportunities by defining a nurse entrepreneur as "someone who identifies a patient need and envisions how nursing can respond to that need in an effective way, and then formulates and executes a plan to meet that need...It's looking for opportunities and really seizing the moment." (Canavan 1996)

An applied example of a cluster in healthcare strategy is found in the sentiments of Tom Priselac, CEO of Cedars-Sinai Medical Center in Los Angeles, California. Priselac (2003) delineates the pursuit of a quality cluster comprised of operational excellence, innovation, program development, performance improvement, and enhancing community relations. In order for the investigators to select competency clusters for study, a specific entrepreneurial literature search was conducted.

REVIEW OF LITERATURE

A literature review determined the characteristics associated with entrepreneurial behavior. Business and social science references, as well as sources which referred directly to healthcare, were selected. This review provided a way to identify the eight competencies (decision making, strategic thinking, risk taking, confidence building, communicating ideas, motivating team members, tolerance of ambiguity, and internal locus of control).

Throughout the readings on entrepreneurial behavior, decision making was emphasized. Entrepreneurs decide quickly and feel stress if unmade decisions accumulate (Lewis 1997). Yet there is tension between deciding quickly and adaptively in the context of rapid change while at the same time executing on time and on budget (Eisenhardt 1997). Lauer (2003) suggests that healthcare managers should take on a more entrepreneurial attitude when making decisions.

Zuckerman (2002) states that extensive and critical thinking about the future and the applicability of any proposed strategy to potential future conditions and circumstances is essential in today's healthcare environment. This strategic thinking is a competency that appears frequently in the literature on entrepreneurship. Clinicians are advised to develop an entrepreneurial mindset focused on strategy development (Scott 2001; Manion 1990). Risk assessment is a common aspect of strategic planning.

Risk taking is a key characteristic of the entrepreneur (Lewis 1997). A recent survey showed that entrepreneurs are less risk adverse than employees

(Hartog, Ferrer-i-Carbonell and Jonker 2002). Yet at times, researchers use the word entrepreneur in a pejorative manner to identify managers who take risks irresponsibly (Berman and West 1998). A call has gone out to healthcare organizations to become more innovative in creating new market opportunities (Gershon and Pattakos 2004). This will first necessitate the future healthcare administrator developing risk-taking behavior.

Related to risk taking is the issue of one's confidence. Research has demonstrated the importance of confidence building for the entrepreneur. Ray (1994) showed in an international study that entrepreneurs are distinguished from managers in their ability to give up job security because they have confidence that they will succeed. Another study which compared entrepreneurs and managers showed entrepreneurs being much more confident when they were correct on general questions being asked (Busenitz and Barney 1997). Businesses, which have entrepreneurs leading them, can acquire benefits as demonstrated in one study where entrepreneurs with high self-assurance led their companies to a faster rate of growth (Singh 1989).

Entrepreneurs must communicate their ideas to garner support. They use persuasion or accommodation to build support for their ideas (Borins 2000). Communication of ideas and concepts is considered critical for the entrepreneurial nurse, according to one nurse executive (Parker 1998). When sponsoring an Entrepreneur Day at Reinhardt School of Business, communicating ideas was one of the major attributes said to be necessary to operate a business (Reinolds 1998). Communicating ideas was viewed in the current study as articulating thoughts and plans relative to group tasks. The understanding and buy in of ideas is likely to influence team member motivation.

Motivating team members is another behavior associated with entrepreneurs. Fligstein (1997) describes entrepreneurs as having the ability to motivate cooperation of others by providing them with common meanings and identities. Technical entrepreneurs tend to favor a system where workers can select and evaluate peers, thereby having a hand in motivating the workforce (Barnard 1997). A strong team-based culture will produce success for the entrepreneur's company (Tai 2001).

Entrepreneurs thrive in turbulent, uncertain environments (Hill and Levenhagen 1995). No one can deny that the healthcare industry fits this description. Entrepreneurs are observed to have high tolerance for ambiguity (Grousbeck 1997). They thrive on ambiguity, preferring a vague rather than a specific situation, and see ambiguity as an opportunity (Price 1992). Entrepreneurs cultivate a tolerance for variation and the ambiguity that naturally arises from variance (Crow 1998).

One of the more common attributes of entrepreneurs in literature and research is that of internal locus of control. Brockhaus (1982) noted that

entrepreneurs had a greater sense of internal locus of control than the general population. Gasse (1985) also notes the importance of an internal locus of control for entrepreneurs and reported it to be more significant than achievement needs. Similarly, the Small Business Institute conducted a follow up evaluation study to one of their entrepreneurial training programs. Their findings indicate a significant correlation between internal locus of control and positive attitudes toward entrepreneurship (Hatten 1995).

After reviewing literature on entrepreneurship in healthcare and other industries, and factoring in our own field experience, eight competency clusters were identified:

- Decision Making,
- Strategic Thinking
- Risk Taking
- Confidence Building
- Communicating Ideas
- Motivating Team Members
- Tolerance of Ambiguity
- Internal Locus of Control

LEARNING-CENTERED ACTIVITIES

A new learning paradigm has emerged which places the responsibility on higher education for true student learning (Barr and Tagg 1995). These learning-centered approaches adapt well to the undergraduate health administration classroom, allowing for the use of active learning activities. Instructors identify a set of learning activities that together include opportunities for students to acquire information and ideas, engage in a doing or observing experience, and reflect on the learning process as well as the subject matter (Fink 2003).

Below we provide a framework to suggested exercises that can be used to stimulate entrepreneurial behavior. The pedagogy suggested can be used in a variety of undergraduate health administration courses. Some examples could be a management processes class, a leadership class or a class on marketing and strategic planning.

STUDENT QUESTIONNAIRE

A student questionnaire is used as an opportunity for students to reflect on their entrepreneurial skill level. Table 1 presents each of the eight competencies and their corresponding item number on the survey. Table 2 indicates the question stem text, the survey item number, the items corresponding scale (S),

Table 1. Eight Competencies and Corresponding Items

<u>Competency</u>	<u>Scale</u>	<u>Item #s</u>
Decision making	(DM)	3,11
Strategic thinking	(ST)	8,10
Risk taking	(RT)	13,18
Confidence building	(CB)	1,4,15
Communicating ideas	(CI)	12,19
Motivating team members	(MTM)	14,16
Tolerance of ambiguity	(TA)	2,5,9
Internal locus of control	(ILC)	6,7,17

and theorized possible interactions with other scales (X). Questions were derived from definitions and examples of entrepreneurship in the literature. The questionnaire is included at Appendix A.

QUESTIONNAIRE USE IN THE CLASSROOM

This instrument was designed for purposes of reflection toward skill development and not evaluation for a grade or promotion. To administer, make copies without the title, being sure to include the instructions. Give to students early in their coursework. After they take the survey, have each student self-score. Since each student will rate herself or himself differently there is little value in students comparing scores. Rather, encourage reflection and then discussion on the items. After several weeks of the coursework, administer the test again, and see if scores have changed. Hold a class discussion on how much and why scores might have changed. What does a potential shift in entrepreneurial competency potentially mean for the students in their work and for the industry?

Be advised that undergraduate students in general are expected to have less entrepreneurial tendencies than graduate students. This was validated by the authors when the undergraduates in a leadership class had on the average 5.05 points lower in their overall score as compared to a graduate leadership class at the same school. We theorize this is due to the usually greater level of experience of graduate students that would make them more comfortable and familiar with some of the eight competency clusters being evaluated.

SCORING

In order to score the questionnaire, reverse scores on item #'s 3, 6, 8, 9, 12 & 18 such that 1=7, 2=6, 3=5, 4=4, 5=3, 6=2, and 7=1. Add up the total. The greater the score, the higher one's self-perception of his or her entrepreneurial competencies is indicated.

Table 2. Competencies and Question Stem

#	Question Stem	DM	ST	RT	CB	CI	MTM	TA	ILC
1	I am confident in my ability to communicate ideas and concepts to others.				S	X	X		
2	Many of our most important decisions are based on insufficient information.	X		X				S	
3R	I have a tough time making decisions.	S		X	X				
4	When something is not right, I am likely to be one of the first to jump in and try to change it.	X			S			X	
5	It is more fun to tackle a complicated problem than a simple one.		X				X	S	
6R	I often feel that I have little influence of the direction my life is taking.	X			X				S
7	I am in control of my own destiny.			X	X				S
8R	I am not very strong on strategic planning.	X	S		X				
9R	I prefer what I am used to compared with what is unfamiliar.							S	
10	I am well organized.		S		X				X
11	I take a "can do" approach to all challenges.	S			X				X
12R	I'm not very diplomatic when it comes to sticky situations.				X	S	X		
13	I am very good at identifying opportunities.	X	X	S					
14	I have an easy time getting to know new people.				X	X	S		
15	It is very likely that I will own my own business one day		X		S				X
16	I am a team player.		X			X	S		
17	Success is mostly dependent on hard work and ability.	X	X						S
18R	Rarely do I take risks	X		S				X	
19	I am confident in my abilities to motivate and inspire others.				X	S	X		

(R = reversed score item, S = subscale item on that construct, X = theorized interaction with construct)

CLASSROOM TECHNIQUES

The authors suggest a three-step process to entrepreneurial training in the health administration undergraduate classroom – 1) Introduce importance, 2) Demonstrate skills and importance, and 3) Provide opportunities for practice. An example method would be to place students into groups of three to seven members and ask them to form fictitious healthcare organizations. Some examples created in past classroom experience have been a hospital, a government authority, an HMO, a medical device company, a pharmaceutical research company, and a healthcare advocacy group. Throughout the course, learning-centered activities engage the student groups in building their organizations. The respective organizations are named, staffed, and given a mission, vision, and value statement. Creative teaching methods are used to have each group complete team assignments that emphasize the management processes (i.e., planning, organizing, communicating, controlling) or other subject matter being studied in the course.

In addition to group assignments, lectures, experiential exercises such as role-plays and simulation games, case studies, and reflection papers are the primary classroom techniques used. Class sessions present information, case examples, and discussion on a particular topic associated with entrepreneurial competency (See Table 3). Some examples of specific activities conducted were: writing job descriptions, creating organizational charts, reassessing the mission statement, completing a SWOT analysis, developing a strategic position and SMART goals, assessing legal matters (e.g., HIPAA, labor relations, etc...), and decision making addressing the current business challenges in their industry. In addition, activities were selected which had the groups interacting with each other, i.e. interchanging of staff, forming virtual linkages and win-win negotiating.

Table 3. Classroom Techniques

Classroom Techniques	Entrepreneurial Competency							
	DM	ST	RT	CB	CI	MTM	TA	ILC
Lectures	X	X	X			X	X	X
Reading Assignments	X	X	X			X	X	X
Cases	X	X						
Reflection Papers				X	X			X
Group assignments				X	X	X	X	
Role Plays			X	X	X		X	
Simulation			X	X	X		X	

PROFESSOR'S JOURNAL

As a qualitative method of tracking classroom reactions to teaching methods, it is suggested that the instructor take the time immediately following each class session to reflect upon that day's instruction. The professor should note what subject matter the students are picking up on quickly and what sparks interest. The professor should also reflect on opportunities for improvement in the design and presentation of future lectures or exercises.

Themes from the journal notes can be divided into the following four categories – 1) demonstrations of entrepreneurial behavior, 2) reactions to assignments, 3) opportunities for improvement, and 4) general reflections. Demonstrations of entrepreneurial behavior can be in the form of comments and actions. Comments made during class discussions, such as ideas about owning a business, creating a business, and identifying business development opportunities, should be listed. Actions by students, such as taking charge, communicating vision, leadership, and stepping outside of one's comfort zone, should be logged as entrepreneurial demonstrations.

The second category, reactions to assignments, includes two sub-themes – energizing and resistance. Reflect on when the energy of the group seems to lift during group assignments, simulations, role-plays, and/or the during the guest lecture. Resistance will most likely be experienced when ambiguity enters the system and students are confused as to what to do next. This will happen from time to time in role-plays and particularly during simulation exercises, which have ambiguity built into the game.

The third theme, opportunities for improvement, could occur on multiple fronts. Based on the skill profile and goals of the student mix, additional competencies could be added or exchanged to the array in Table 1. For example, developing finance, marketing, and selling proficiencies could further support entrepreneurial behavior. Other opportunities for enhancement would include clarifying the learning objectives of any activity or exercise to increase buy in. Suggestions from the students on timing and order of reading, assignments, and exercises could also be logged. Keep your senses observant as to what works and what doesn't work in the classroom and take note for future reference.

The fourth category, general reflections, is comprised of the professors' sense of effectiveness of that day's class session, i.e. notes on how classes went and the cognitive and emotional responses. The journal notes are a way for the professors to assess their qualitative impressions of the effectiveness and opportunities for improvement of any given exercise. Participant observation is a critical part of field work (Judd, Smith and Kidder 1991). It was therefore deemed important to be able to track observations of events that occur in class

and the responses afterward. In so doing, other potential variables for study are able to emerge. For example, an eye for business development opportunities could have been demonstrated by the several spontaneous conversations that transpire on that topic.

CAUTIONARY NOTE

The dynamic mix between private entrepreneurship and government action forms the complex framework of American healthcare (Iglehart 2002). Regina Herzlinger (2003) criticizes how the United States government inhibits entrepreneurship in healthcare, "where the doctors who are uniquely qualified to create and manage health service businesses are prohibited from owning most of them; where entrepreneurs often must pass a local government smell test before they are permitted to build new facilities; and, worst of all, where government dictates the prices and the exact characteristics of the insurance benefits for which it will pay." Entrepreneurial development in healthcare professionals is being looked at as a way for the industry's workforce to leverage this complexity. But some are cautious when they think of healthcare managers and leaders as being truly entrepreneurial (Harman 2001).

Profit making motives often times conflict with policies set by public policy, thereby stifling creative plans. The United States government is rightfully concerned with inappropriate admissions for service and unnecessary programs. Too often we are finding healthcare systems that have gone awry. First there was Columbia in the 1980s under the leadership of their CEO, Richard Scott. Scott built economic alliances between his company's hospitals and their practicing physicians which the government was later to rule illegal (Kleinke 1998).

Currently, the United States government is looking at Tenet Healthcare and investigating whether their method of raising prices to result in higher outlier payments for Medicare patients was inappropriate. Other alleged activities, e.g. unnecessary surgeries and alleged physician kickbacks, are also currently under review. Some attribute Tenet's aggressive behavior, which led to its rise and now potential fall, to its CEO, Jeffrey Barbakow (White 2002).

Could these leaders be considered entrepreneurial as they pushed their executives and top managers for higher profits? Or did they let the momentum of a climbing stock price, which supported their astronomical salaries and bonuses, get in the way of making ethical business decisions? Billion dollar settlements with the government, like Columbia's mask the true intent of these leaders (Taylor 2002). The latest fall from grace seems to be Richard Scrusby, the former CEO of the rehabilitation giant, HealthSouth. This is a criminal

investigation gaining speed with many of HealthSouth's top executives pleading guilty to fraudulent financial reporting (Romano 2003).

This warning of overzealous entrepreneurial spirit is not directed only at healthcare systems. Financial pressures are causing physicians to become more entrepreneurial as well, but there is a concern that changes made to their practice behavior might negatively affect some patients' access to basic care (Pham, Devers, May and Berenson 2004). Hence we proceed with caution — we must understand that the process of separating those leaders and managers who are utilizing entrepreneurial competency clusters appropriately from those who are exhibiting the behavior for ill gain will be a key aspect in future training and evaluation. There is no doubt that healthcare entities today need to expand proficiencies. Building on past and current research, educators and training managers can provide effective and efficient methods for learning and knowledge transfer to the workplace.

CONCLUSION

Many hospitals, physician groups, health plans, and long term care systems are taking a more critical look at which of their components are profitable. They are carefully considering divesting themselves of certain problematic services and developing more strategic choices and partners while still fulfilling their organization's mission. In the better-managed facilities where costs have been reduced significantly, administrators have a better understanding of their core operations. The competitive marketplace is now pushing these healthcare organizations to move out of their operational comfort zones to secure and maintain market share (Henley 2000). New entrepreneurial behavior is needed by healthcare managers to support this effort.

This paper employs a developmental approach in order to address the challenge of entrepreneurial training in healthcare administration. By beginning to define competencies as trainable and to assess learning, the undergraduate student can begin to appreciate the eight clusters identified (decision making, strategic thinking, risk taking, confidence building, communicating ideas, motivating team members, tolerance of ambiguity, and internal locus of control). Through structured learning-centered activities, students can obtain hands-on experience with entrepreneurial behavior. Through a thoughtful reflection process, the instructor can continue to develop entrepreneurship as a learned competency for the students. With this article, the authors encourage further study and debate toward the development of best practices in entrepreneurial skill training for healthcare managers, as it surely will bring benefits to the field.

REFERENCES

- Barnard, J. "The Workplace Environment: What Do Technical Workers Want?" *Industrial Management* 39 (1997): 14-17.
- Barr, R. and Tagg, J. "From Teaching to Learning: A New Paradigm for Undergraduate Education." *Change* 27 (1995): 697-710.
- Berman, E. and West, J. "Responsible Risk-Taking." *Public Administration Review* 58 (1998): 346-353.
- Bhide, A. "How Entrepreneurs Craft Strategies That Work" *Harvard Business Review* 72 (1994): 150-161.
- Bloom, Nedra. "Healthcare Yields Entrepreneur Possibilities." *Eastern Pennsylvania Business Journal* 2 (1991): 22.
- Borins, S. "Loose Cannons and Rule Breakers, or Enterprising Leaders? Some Evidence About Innovative Public Managers." *Public Administration Review* 60 (2000): 498.
- Brockhaus, R. H. "The Psychology of the Entrepreneur." In *Encyclopedia of Entrepreneurship*, edited by C.A. Kent, D.L. Sexton and K.H. Vesper. Englewood Cliffs, NJ: Prentice Hall, 1982.
- Busenitz, L. and Barney, J. "Differences Between Entrepreneurs and Managers in Large Organizations: Biases and Heuristics in Strategic Decision Making." *Journal of Business Venturing* 12 (1997): 9-31.
- Canavan, K. "Entrepreneurship to Meet Patient Needs, Personal Goals." *The American Nurse*, (November/December 1996): 28.
- Carey, B. "A Visit with Dr. Deluxe." *Los Angeles Times* July 22, 2002: S1, S6.
- Crow, G. "The Entrepreneurial Personality: Building a Sustainable Future for Self and the Profession." *Nursing Administration Quarterly* 22 (1998): 30-36.
- Drucker, P. "The Discipline of Innovation." *Harvard Business Review* Reprint R0208F (1995): 149-156.
- Eisenhardt, K. "Strategic Decisions and All that Jazz." *Business Strategy Review* 8 (1997): 1-4.
- Fink, L.D. "Creating Significant Learning: Designing the Learning We Want into the Student Experience." *NEA Higher Education Advocate* 20 (2003): 5-7.
- Fligstein, N. "Social Skill and Institutional Theory." *American Behaviorist Scientist* 40 (1997): 397-396.
- Gasse, Y. "A Strategy for the Promotion and Identification of Potential Entrepreneurs at the Secondary Level." In *Frontiers of Entrepreneurship Research*, edited by J. A. Hornaday, E.B. Shils, J.A. Timmons, and K. H. Vesper. Wellesley, MA: Babson College, 1995.

- Gershon, H., and Pattakos, A. "Creating Market Opportunities: Innovation is Key." *Journal of Healthcare Management* 49 (2004): 9-11.
- Gracie, Sarah. "Entrepreneurs Take Lessons in Discovering Tricks of the Trade." *Sunday Times - London* December 10, 2000: 15.
- Grousbeck, H. "What It Takes to Run Your Own Show." *Christian Science Monitor* 89 (1997): 9.
- Guo, K. "Roles of Managers in Academic Health Centers: Strategies for the Managed Care Environment." *The Healthcare Manager* 20 (2002): 43-58.
- Harmon, L.B. *Ethical Challenges in the Management of Health Information*. Gaithersburg, Maryland: Aspen Publications, 2001.
- Hartog, J., Ferrer-i-Carbonell, A. and Jonker, N. "Linking Measured Risk Adversion to Individual Characteristics." *Kyklos* 55 (2002): 3-27.
- Hatten, T. and Ruhland, S. "Student Attitude toward Entrepreneurship as Affected by Participation in an SBI Program." *Journal of Education for Business* 70 (1995): 224.
- Hays, P. "Observations on Apparent Paradoxes: Healthcare Markets in the New Millennium." *Healthcare Management Review* 25 (2000): 79-84.
- Henley, R.J. "Update Your Skills to Advance Your Career." *Healthcare Financial Management* 54 (2000): 14.
- Herzlinger, R. "Back in the U.S.S.R." *Wall Street Journal*, November 26, 2003.
- Hill, R. and Levenhagen, M. "Metaphors and Mental Models: Sensemaking and Sensegiving in Innovative and Entrepreneurial Activities." *Journal of Management* 21 (1995): 1057-1075.
- Iglehart, J. "Business & Government: Striking New Balances." *Health Affairs*. 21 (2002): 7-8.
- Judd, C., Smith, E., and Kidder, L. *Research Methods in Social Relations*. Fort Worth, Texas: Harcourt Brace Jovanovich College Publishers, 1991.
- Kleinke, J.D. "Deconstructing The Columbia/HCE Investigation." *Health Affairs* 17 (1998): 7-26.
- Kowalski, R. and Campbell, M. "Leadership Skills Help Financial Managers Achieve Career Success." *Healthcare Financial Management* 54 (2000): 50-52.
- Lauer, C. "Follow Your Instincts." *Modern Healthcare* 33 (2003): 24.
- Lewis, B. "If the Entrepreneur's Hat Fits, Learn Your Company's Needs Before Wearing It." *InfoWorld* 19 (1997): 80-81.
- Mascaro, L. "There Can Only Be One: Trump Towers on TV Show." *Daily News*, March 25, 2004: 1,15.

- Manion, J. *Change From Within: Nurse Entrepreneurs as Healthcare Innovators*. Kansas City:American Nurses Association, 1990.
- Mintzberg, H. *The Nature of Managerial Work*. New Jersey: Harper-Row, 1973.
- Morrison, A. and Thomas, R. "The Future of Small Firms in the Hospitality Industry." *International Journal of Contemporary Hospitality Management* 11 (1999): 148-154.
- O'Conner, E. and Fiol, C.M. *Reclaiming Your Future: Entrepreneurial Thinking in Healthcare*. Tampa, Florida:American College of Physician Executives Publication, 2002.
- Parker, M. "The New Entrepreneurial Foundation for the Nurse Executive." *Nursing Administrative Quarterly* 22 (1998): 13-22.
- Pham, H., Devers, K., May, J. and Berenson, R. "Financial Pressures Spur Physician Entrepreneurialism." *Health Affairs* 23 (2004): 70-81.
- Price, C. *Healthcare Innovation and Venture Trends*. Albany:Delmar Publishers, 2002.
- Priselac, Thomas. "Strategic Positioning Based Upon Delivering Quality Healthcare Services." Presentation at the meeting of the UCLA Healthcare Collaborative, Los Angeles, CA, March 13, 2003.
- Pyenson, B. *Managing Risk: A Leader's Guide to Creating a Successful Managed Care Provider Organization*. Chicago: AHA Publishing, 1998.
- Ray, D. "The Role of Risk-Taking in Singapore." *Journal of Business Venturing* 9 (1994): 157.
- Reinolds, C. "Growth & Development: Bascomb School's First Grades Come In." *Atlanta Journal and Constitution* December 12, 1998: JQO6.
- Romano, M. "Firm's health going south." *Modern Healthcare* 33(2003): 4-5, 12-13.
- Rubin, E. and Lindeman, L. *The Nexus of Research & Business: Balanced Solutions for Academic Health Centers*. Washington D.C.:Association of Academic Health Centers, 2002.
- Scott, C.K. *Building Your Ideal Private Practice: A Guide for Therapists and Other Healing Professionals*. Alexandria, VA:American Physical Therapy Association, 2001.
- Simpson, R. L. "Technology and the Potential for Entrepreneurship." *Nursing Management*. 28 (1997): 24-26.
- Singh, S. "Personality Characteristics, Work Values, and Life Styles of Fast- and Slow-Progressing Small-Scale Industrial Entrepreneurs." *Journal of Social Psychology* 129 (1989): 801-806.
- Tai, G. "Leaders in the Rough." *Computerworld*, March 1, 2001: 40.
- Taylor, M. (2002). "Some Fraud Fight Left." *Modern Healthcare*. 32(51):6-7,12-13.
- Tuohy, C. "Dynamics of a Changing Health Sphere: The United States, Britain, and Canada." *Health Affairs*. 18 (1999): 114-134.

Webster's II New Riverside University Dictionary. Boston: Riverside Publishing Company, 1984.

White, R.D. "Pressure on Tenet Chief to Resign." *Los Angeles Times*. November 13, 2002.

Williams, D.R., Duncan, W.J., Ginter, P.M. "Healthcare Administration Education in the 21st Century: The Case for Entrepreneurship." *The Journal of Health Administration Education* 23 (2005): 283-298.

Wong H. "Entrepreneurship in Healthcare - Why We Do It so Poorly. Interview by Joe Flower." *Health Forum Journal* 42 (1999): 21,23,27-28.

Zuckerman, A. *Improve Your Competitive Strategy*. Chicago:Health Administration Press, 2002.

APPENDIX A

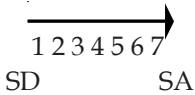
Entrepreneurial Competency Questionnaire

In the space before each statement please write the number that represents your level of agreement or disagreement with each statement.

Rating Scale

(1) Strongly disagree (2) Moderately disagree (3) Slightly disagree (4) Neither agree nor disagree (5) Slightly agree (6) Moderately agree (7) Strongly agree

Level of Agreement increases with Number.



1. _____. I am confident in my ability to communicate ideas and concepts to others.
2. _____. Many of our most important decisions are based on insufficient information.
3. _____. I have a tough time making decisions.
4. _____. When something is not right, I am likely to be one of the first to jump in and try to change it.
5. _____. It is more fun to tackle a complicated problem than a simple one.
6. _____. I often feel that I have little influence of the direction my life is taking.
7. _____. I am in control of my own destiny.
8. _____. I'm not very strong on strategic planning.
9. _____. I prefer what I am used to compared with what is unfamiliar.

10. _____. I am well organized.
11. _____. I take a “can do” approach to all challenges.
12. _____. I’m not very diplomatic when it comes to sticky situations.
13. _____. I am very good at identifying opportunities.
14. _____. I have an easy time getting to know new people.
15. _____. It is very likely that I will own my own business one day.
16. _____. I am a team player.
17. _____. Success is mostly dependent on hard work and ability.
18. _____. Rarely do I take risks.
19. _____. I am confident in my abilities to motivate and inspire others.