Teaching and Assessing “Critical Thinking”

In Undergraduate Business Education

By

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Abstract

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The motivation for this research comes from the need for our business students to learn not only subject matter through traditional teaching methods in a classroom, but also improve their “critical thinking skills” through experiences linked either directly to an actual workplace or closely imitating the real business world. The terminology used today for this type of student experience is referred to as “experiential learning.” This experiential learning may come in two forms: either (1) learning by yourself or (2) through experiential education (learning through experiential programs established by others). Experiential learning is a highly regarded topic among academics these days and the research in this dissertation involved testing the improvement in critical thinking skills of business students by implementing specific “experiential learning components” into business classes. The issue at hand is simple - does experiential education create critical thinkers among our students and make them more aware of and able to more easily solve the business problem(s) at hand?

The purpose of the research presented in this dissertation was to test how critical thinking skills were affected by two original and different experiential programs at two different colleges in the New York/New Jersey geographical area. Additionally, this research tests how a real business experiential learning component can be integrated as a critical part of
the total education of students participating in four different business classes.

The findings of this research are profound in the respect that both the participating subjects (students) and the participating businesses achieved significant benefits when this mode of education was used. The conclusions in this work signify that although more research is needed to further determine the significance of the impact of experiential learning, we have come away with a true picture of the educational benefits for the students and the productive benefits for the businesses involved.
Dedication

This dissertation is dedicated to my wife, Yolanda, and my son, Alex. Without their patience, support, and valued perspective, the completion of this work would not have been possible.

I would also like to dedicate this work to my parents, Phil and Gloria, who taught me to understand that the proper mix of imagination and dedication can overcome almost any obstacle.
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I would also like to thank Dr. William Buchanan for his support and consultation in preparing some of the more sophisticated statistics included in this research.
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Definitions of Key Terms

**Action Learning** - is the dynamic process of a group of students applying their skills to what would be a real world problem or situation while also reflecting on what they are learning and how their learning is affecting other members of the group (Schwandt & Marquardt, 2000).

**Age cohorts** - people with shared histories, which produce unique shared values and behaviors; often function as unique market segments, referred also as ”Generation Y” or “Millennial generation” (Hawkins & Mothersbaugh, 2007).

**Business Incubators** - a college/university business incubator refers to an incubator program sponsored by a university to nurture new or small businesses by providing support throughout the early stages of development (Knopp as cited in Todorovic & Suntornpithug, 2008a).

**Center for Entrepreneurial Leadership at the Monmouth University** - Monmouth Center for Entrepreneurial leaderships is a key partner in this dissertation research. Purdue University, among others, also provides full service support for new or small business ventures. Belmont University (Center for Entrepreneurships in the College of Business Administration), and Alberthy in Scotland, are examples of schools that also have business incubators, but do not provide financing support, office space, computer technology, patent and trademark services or the like (“Monmouth University Center for Entrepreneurship,” 2013).

**Creativity** - in education, is divergent thinking that leads the individual to numerous and varied responses as opposed to convergent thinking where there is one correct answer (Runco, 2006).

**Critical Thinking** (CT) - critical thinking is purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation and inference, as well as explanation of the evidential, conceptual, methodological, criteriological or contextual considerations upon which that judgment is based (Facione, 1990). Many other definitions of Critical thinking have been

**Critical thinker** - critical thinker is habitually inquisitive, well informed, trustful of reason, open minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider …. and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit (Abrami et al., 2008; Facione, 1990).

**Critical Thinking Skills** - the Delphi committee identified six summary skills regarding critical thinking. They are (1) interpretation, (2) analysis, (3) evaluation, (4) inference (5) explanation, and (6) self-regulation (Abrami et al., 2008).

**Entrepreneurship** - the process by which individuals, either on their own or inside organizations pursue opportunities without regard to the resources they currently control (Todorovic & Suntornpithug, 2008b).

**Essay- Prompts** – The essay-prompt is a cue question purposely constructed for the student to “make an argument” about a topic. Students are instructed to provide justifications and examples to validate opposing points of view (Klein, Benjamin, Shavelson, & Bolus, 2007) to assess students’ critical thinking skills.

**Experiential learning** - is the process of making meaning from direct life experience. Simply put, Experiential Learning is learning from experience. Experiential Learning focuses on the process of the individual, as opposed to experiential education (Itin, 1999).

**Experiential Education** - often associated with Dewey (1938) and as described by Itin (1999), is a philosophy of education that describes the process that occurs between a teacher and a student when direct experience is infused into the learning environment and the course structure.
**Generation Y** - this marketing based demographic segment is also called a generation or age cohort and is defined as a “group of persons who have experienced a common social, political, historical and economic environment (Hawkins & Mothersbaugh, 2007, p. 123). This generation’s current age range is 18 to 35 in 2012, and they have approximately 71 million members.

**Internships** - are an opportunity to integrate career related experience into an undergraduate education by participating in planned, supervised work and are designed to allow students to test the theory that they do not benefit as much from mastering a vast amount of domain knowledge if they do not learn to synthesize and contextualize that knowledge with a “real world” experience (“What is an Internship,” 2011).

**Marketing Business “Clients”** - these are the businesses and organizations and their representatives that are the students’ main interface during the marketing experiential process. These individuals ostensibly share in the teaching role of the students by negotiating the mutually agreed scope of work, and communicating and supervising the marketing teams through the process. This role is an attempt to simulate the client roll in an advertising agency, including clients’ honest feedback about the efficacy of the agency work. A complete list of actual clients for Wagner Study One is included as Appendix E)

**Marketing experiential component** - is an experiential component specifically created for this research design, which allows students to experience and be measured by their marketing performance with a real company and while supplying a series of negotiated marketing deliverables (Author’s definition).

**Millennial generation** - is the label given to those born after 1994 and the first generation to come of age in the new millennium. This generation’s current age range will be between 1 and
18 years in 2012 and they have approximately 62 million members (Hawkins & Mothersbaugh, 2007; Keeter & Taylor, 2009).

**Project Based Learning (PBL)** - is the use of in-depth and rigorous classroom projects to facilitate learning and assess student competence. Students use technology and inquiry to respond to a complex issue, problem or challenge. PBL focuses on student-centered inquiry and group learning with the teacher acting as a facilitator (Savery, 2006).

**Scope of Work** - is a framework that defines the division of work to be performed for a client, typically broken into specific tasks with deadlines. Common sub headings include the problem statement, the goal of the agreement, and the responsibilities of each partner to the agreement including students, client and professor (California Energy Commission, 2011).

**Service Learning** - is a pedagogical strategy that provides an opportunity for students to learn important life skills by giving back to their communities. By participating in these kinds of rewarding experiences students learn to organize information, resources, and people in order to better their cities, schools, and towns (National Service-Learning Clearinghouse, 2013).

**Wagner Plan** - is a teaching plan introduced and pioneered by Wagner College (Staten Island, NY) which comprised of three learning communities that require an experiential learning component (“Wagner Plan for the Practical Liberal Arts,” 2012).

**Wagner Plan of Experiential Learning** - includes an experiential component at the freshman level (usually civic engagement), the intermediate level (usually interdisciplinary studies) and at the senior level (usually in the form of an internship or research project (Guarasci & Cornwell, 1997).
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Chapter 1: Introduction

Purpose of the Study

The main purpose of this thesis is twofold:

Generally, to determine the efficacy of business school education in preparing students for subsequent employment.

Specifically to assess the degree to which such business education develops students’ critical thinking (CT) skills (detailed definition below), and whether embedding experiential learning components into the syllabus (students undertaking real life business assignments) would improve those CT skills.

Another anticipated outcome of this thesis is to report on the qualitative findings of this study. Based on the author’s personal interviews, students’ evaluations and personal communications with participants, the thesis intends to provide further information as to how other business teachers and other participants could adapt their courses to improve students’ critical thinking skills by embedding experiential learning exercises.

Critical Thinking Defined

Since CT is a core element in this thesis, an expanded definition from the literature is offered here.

Thinking is being human. There are many forms of thinking. For example, six different thinking skills were identified by the Department of Labor as it was listed by Kane et al. (1990). Those skills are (1) Creative thinking: generates new ideas (2) Decision making: specific goals and constraints, generate alternatives, consider risks, and evaluate and choose best alternatives (3) Problem solving: recognizes problems and devises and implements a plan of action (4) Seeing things in the mind’s eye: organizes and processes symbols, pictures, graphs, objects and
other information (5) **Knowing how to learn:** uses sufficient learning techniques to acquire and apply new knowledge and skills and (6) **Reasoning:** discovers a rule or principle underlying the relationship between two or more objects and applies it while solving a problem. Critical thinking (CT) is just one of the many ways humans think. There are also countless definitions of critical thinking in the literature. Below is a selected list of relevant definitions of critical thinking, in chronological order:

- **Dewey** is considered by many to be the father of the modern critical thinking concept, in his book titled *How We Think* (1910) laid the ground work for the connection between critical thinking and experiential learning. He believed that critical thinking is an “active, persistent and careful consideration of a belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (Dewey, 1910, p. 6). While over 75 years old, Dewey’s basic concept of critical thinking is still often quoted, and remains an inspiration for many authors in the literature for critical thinking. I was personally inspired by Dewey’s early work in his basic description of critical thinking, particularly as it relates to the concept of “learning by doing.”

- **Glaser** (1941) in his seminal study on critical thinking and education was able to expound upon the Dewey definition by defining critical thinking as (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one’s experiences (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods. While Glaser does require open mindedness and effort to objectively examine beliefs and common knowledge, he puts emphasis on finding practical means for solving these problems and to apply that knowledge to draw conclusions. Glaser, in his work, further concurs with the author’s
views when he asserts that critical thinking is to re-examine one’s belief patterns on the basis of a broader experience.

- In their presentation offered at the 8th Annual International Conference on critical thinking and education reform in summer 1987, Scriven and Paul (“Defining critical thinking,” n.d.) said “Critical thinking is the intellectual disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, or communication, as a guide to belief and action.” In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth and fairness. In describing critical thinking, Scriven and Paul (“Defining critical thinking,” n.d.) further refer to the idea that CT is improved by objections from various points of view followed by discussion and reconciliation. In management it is often the competing objections, and various perspectives that allow the broad mix of alternatives that become molded into an optimum decision. Scriven and Paul also recognize interwoven modes of thinking and economic thinking as part of their definition of critical thinking.

- Facione (1990) formed what was called the Delphi panel, which developed a list of specific personal characteristics that were prone to stand out in the effective critical thinker. These included the more general “Approaches to Life” list, which includes (1) inquisitiveness (2) desire to be well informed (3) eagerness to use critical thinking (4) trust in reasoned inquiry (5) self confidence (6) open mindedness (7) flexible in considering alternatives (8) understanding of opinions (9) fair-mindedness (10) honesty
in self appraisal (11) prudence in suspending (12) making or altering judgments, and (13) willingness to consider and revise views. The second list of characteristics include the “Approaches to Specific Issues, Questions or Problems,” which include (1) clarity in stating questions or concerns (2) orderliness in working with complexity (3) diligence in seeking relevant data (4) reasonableness in selecting and applying criteria (5) care in focusing on immediate concerns (6) persistence in the face of difficulties and (7) precision in thinking to the degree permitted. These personal characteristics seem to incorporate the personal characteristics required to fulfill the definitions of critical thinking. Accordingly, a well-cultivated critical thinker would (1) raise vital questions and problems, formulating them clearly and precisely (2) gather and assess relevant information, using abstract ideas to interpret it effectively (3) come to well-reasoned conclusions and solutions, testing them against relevant criteria and standards (4) think open-mindedly within alternative systems of thought, recognizing and assessing, as needs be, their assumptions, implications, and practical consequences, and (5) communicate effectively with others in figuring out solutions to complex problems (Facione, 1990, p. 25).

- Halpern (1997) wrote a book on the topic of critical thinking called Critical thinking across the curriculum: A brief edition of thought and knowledge. In her book she supplemented the definition to include not only the concepts of teaching and learning critical thinking for the purposes of education, but also for the purpose of life efficacy.

- Browne and Keeley (2000) published a definition of critical thinking with a different point of view. They state that critical thinking is a process. The process begins with a type of argument, and gradually progresses toward a detailed evaluation. The process is
activated by three interrelated activities: (a) asking important questions designed to recognize and evaluate what is being said (b) answering those questions specifically by focusing on their impact on stated inferences, and (c) displaying the desire and ability to implement a solution to those critical questions. This definition introduces the critical thinking process as somewhat of a sophisticated debate, ending with some presumable agreed upon action.

- The 8000 member Critical Thinking Community in Berkley, CA (“Defining critical thinking,” n.d.) defined critical thinking in a most general way, as “self guided, self disciplined thinking, which attempts to reason at the highest level of quality in a fair minded way.” More specifically, the thinker is skillfully analyzing, assessing, and reconstructing his/her thinking. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism” (“Defining critical thinking,” n.d.).

- In her dissertation, Joanne Reid (2010) applied her own critical thinking research to the Halpern methodology (see above) and defined critical thinking as “the conjunction of knowledge, skills and strategies that promotes improved problem solving, rational decision making and enhanced creativity” (Reid, 2009, p. 2).

- To illustrate the broad range of critical thinking definitions, if one considers the use of case studies in various disciplines, the most fundamental definition is that a case is a description of one or more events in an environment. Three writers Merriam, Stake and Yin categorize them differently:
The operational definition of Critical Thinking for the purpose of this dissertation is inspired by the National Science Foundation and a number of qualified scholars on the subject. This definition includes the following five aspects:

1) The establishment of reflective thinking toward the evolution of multiple solutions to a problem.

2) Using facts and evidence to deduce, infer, evaluate and support conclusions.

3) Using reasoning and strategies to solve problems.

4) Enhance deductive and inductive reasoning.

5) Effectively see a problem from multiple sides including other people’s perspectives (Armstrong, 2000; Ennis, 2002; Halpern, 2002; Mason, 2007; McPeck, 1981; Papastephanou & Angeli, 2007; Willingham, 2007).

**Experiential Learning and Work Based Learning Defined**

Since it is the central core of this thesis that experiential learning leads to improved critical thinking skills, both experiential learning and work based learning are further defined here.

Experiential learning is a process of acquiring skill or knowledge by practical means such as learning by action or by experiencing reality, as distinct from receiving processed data from second parties. Experiential learning may be considered from the viewpoint of the individual...
tasked with achieving one or more goals and as a broader pedagogic activity of group education. This latter meaning is concerned with relationships between instructor and pupil as well as educational structure and objectives.

Work Based Learning (WBL) stands for the inter-relationship and inter-dependency between understanding learning, critical reflection and the identification and development of practical application capability (Brodie & Irving, 2007). In addition to Brodie and Irving, a growing number of authors and organizations are in favor of WBL as the best method to teach CT skills in business. For example, a similar finding was reported by Andrews and Higson (2008) as it relates CT skills obtained by business students during various European work placements in their WBL program. Some specifically prefer a broader use of internships because unpaid employment offers a larger sample and represents another form of learning through experience. Braunstein and Loken (2004) say that WBL is the most effective means to develop work competencies in business graduates. This is precisely my assumption when designing my research. I view this as an idea whose time has come, and that needs to be proven effective and developed and refined as an educational tool in order to evolve to the phase of business education.

According to the Civic Enterprises study (Bridgeland, Milano, Rosenblum, & Civic Enterprises, 2011), employers also think it is the best method to close the skill gap is WBL. Hernandez-March et al. (2009) published that company directors, interviewed in their study, believe that WBL provides the best way to gain competencies that are specific to the work environment. In agreement, most of the employers surveyed, found that WBL is the ideal complement to academic training making it possible for business students to discover the application of theoretical knowledge in the workplace. According to Hernandez-March et al
(2009), companies benefit from WBL in many ways, not the least of which is a personnel screening and hiring mechanism. In a comprehensive study of Work Based Learning conducted by Swail (the President of the Educational Policy Institute) and Kampits (Director of New England Schools of Colleges) (2004), the authors concur with the advantages for employers, adding that many of the skills learned by students in any form of employment is transferable to other forms of employment. This will reduce training time for future employers because the students have become acquainted with basic business protocol. From the student perspective, Wentz and Trapido-Lurie (2001) found that WBL helped students clarify their career aspirations, develop soft skills (i.e. communication, problem solving critical thinking and time management) and increase their professional network. The author believes many business examples from required textbooks and the companies used in case study analysis tend to be large companies where the student plays the role of an executive. WBL students also benefit from finding how their role in small projects contribute to the completion of larger projects, and that they will not necessarily begin their career with the management or executive perspective they gained in college.

In conclusion, the Civic Enterprises study (Bridgelend et al., 2011) supports that educational concepts that integrate work and learning are key to a successful strategy in business education. This implies that more cooperation should be fostered between businesses and educational institutions to achieve this end. The report goes so far as to suggest a type of learn while you earn model. According to Dearing (1997) and DEST (2007) the economic review committees now recognize WBL as the best method, and recommend its use. The AACSB accrediting agency now recommends a form of WBL as part of its business accreditation process.
Despite the overwhelming support for WBL in business education, as a result of their study, Hernandez-March et al. do suggest that colleges can improve their WBL programs as follows:

- Have a more suitable placement-matching students with appropriate placement descriptions.
- Make the duration of WBL an ongoing process, longer than a single semester.
- Begin the WBL program earlier in the students’ academic career.

The incorporation of an embedded experiential component into an existing course structure as was accomplished in this research supports the Hernandez-March findings with some additional findings. In order to develop a critical thinking alternative pedagogical application, an instructor must provide

1) A solid knowledge base with deep understanding had to be established with the students (Marzano, Pickering, & Pollock, 2001; Willingham, 2007).

2) Significant time to practice and reflect must be given (Marzano et al., 2001).

3) The basic concepts of critical thought must be taught (Willingham, 2007)

I completely agree with these requirements, and have incorporated each in my research design. My additional findings during the pilot studies were that (1) the students need to be able to select an experiential component that interests them (2) the instructor needs to be active in a partnership with the students and representative of the WBL project in order to relate their experience to the domain knowledge of the specific class (3) the instructor needs to participate with the students to advance and clarify perspectives from the representative of the experiential component, his/her opinion about the experiential exercises, and how those experiences compare to the theory of the utilized text.
Research Reveals Failings

Literature review indicates that business educators and employers believe that there is a skill gap between undergraduate seniors with business majors and the expectations from potential employers in real companies. One of the possible explanations of this skill gap is the lack of purposeful, reflective judgment concerning what to believe or not. Business major graduates do not appear to be unable of deciding whether a claim is always true, sometimes true, partly true, or false, nor are they readily able to distinguish between the truth and validity of claims. They do not possess the skill of reflective reasoning about beliefs and actions. Mintzberg (Stanford expert and critic of existing business school teaching) and Gosling (2002) believe in teaching business functions, yet they acknowledge their graduates have no practice how to administer that knowledge in a real business environment. More recently, the American Association to Advance Collegiate Schools (AACSB), the business school accrediting agency, has reinforced this view by shifting its measurement criteria to include teaching and assessing of critical thinking. As it relates specifically to the skill gap from the employers perspective, the Secretary’s Commission on Achieving Necessary Skills (SCANS) (Kane et al., 1990), an organization of The US Department of Labor, also defined critical and creative thinking as skills needed by industry as educational requirements for entry level graduates as workers to achieve success in their field (Brock, 1991; Kane et al., 1990; Whetzel, 1992).

While educators including Celuch, Black and Warthan, Reid (2009) and L.G. Synder and M.J. Synder (2008) believe that critical thinking skills should be taught in the undergraduate business curriculum, there is much debate as to how this should be accomplished.

Tempelaar (2006) found that many teachers struggle to find the proper way to engage students in CT activities, and students seldom use CT to solve complex, real world problems. As
far as the teaching of CT in business is concerned, Rippen, Booth, Bowie, and Jordan (2002) investigated the use of case-study-methods to teach CT. Celuch and Slama (1998) identified methods of integrating CT skills exercises into business courses and Catanach, Croll, and Grinaker (2000) explored the use of classroom hands-on activities in CT. Reid (2010) used online courses to improve students’ CT skills. Haynes and Bailey (2003) studied the use of detailed questioning in the classroom as a way to promote CT skills. Cassidy (2006) studied the effects of peer assessment to improve “employability skills.” Paulson (2011) used a reality-based group communication problem to enhance CT in the undergraduate college classroom. Critical thinking is often compared to the scientific method in that it is a systematic and procedural approach to the process of thinking. L.G. Snyder and M.J. Snyder (2008) and Paulson (2011) believe that ill structured problems should be introduced to into the syllabi to improve students’ CT skills.

The contention of this thesis is that the best way to teach critical thinking to undergraduate students is the incorporation of an experiential component into the syllabus. This dissertation will systematically investigate the incorporation of two different experiential components into the syllabi at two different institutions by two different instructors in the Fall Semester 2011 and Spring Semester 2012. One experiential component is the introduction of student teams that act as an advertising agency to a real business or organization (Wagner College Study One), and the other experiential component is the introduction of a new product or service by a group of students in the Entrepreneurial Studies Program (Monmouth University Study Two).

**Research Problems/Questions**

The first step to identify the research problems associated with the embedding of experiential learning as part of the current syllabi in undergraduate business education was to initiate a thorough literature review (chapter 2) to answer the following research questions:
1) *Is teaching critical thinking a way to make business schools more relevant?*

2) *What is the current status of business education in general?*

3) *What is the role of colleges and universities in business education?*

4) *How should critical thinking skills be taught?*

5) *How should critical thinking skills be assessed?*

6) *What approaches can be attempted to improve critical thinking skills if one were to establish this as a primary objective in business education?*

7) *Would embedding CT pedagogies into business curricula enhance the value of college graduates in the eyes of their potential employers?*

8) *Should colleges and universities be teaching only domain knowledge, business application skills, or both?*

9) *What is the significance of critical thinking with a particular perspective toward business marketing?*

**Research Objective**

The author of this thesis wants to prove that including an experiential component into his marketing classes (placement of the students in actual business teams) by itself, regardless of the type of the selected client (business type) where the actual experiential exercises are being completed, will improve the critical thinking skills of the participating students. It also was hypothesized that critical thinking skills will improve during the course of only one semester when compared with the control group of students (students proceeding with the standard class). The author of this thesis also expanded the study to prove that including an overall class experiential component in another college class not taught by him (the class selected was the Monmouth University Entrepreneurial study class) would result in the improvement of critical
thinking skills of all students in the class from the beginning of the semester to the end of the semester.

**Research Hypotheses**

1) To determine if an experiential component embedded into a series of 2 undergraduate courses taught at Wagner College in Staten Island, New York by the author in the Fall Semester 2011 and Spring Semester 2012 will improve critical thinking skills among students that elect to participate (experimental group) in the experiential component as compared with those that elect to take the same course with a traditional final instead (control group).

   Null Hypothesis: those students that participate in the experiential component will show no significant differences in their critical thinking scores when compared with those who did participate in the research.

2) To determine if the same type research conducted with a different experiential component with Entrepreneurial Studies courses at Monmouth University by Professor Buzza during the same two semesters in fall 2011 and spring 2012 will show significant improvement in the student’s critical thinking scores as at the beginning of the semester and at the end of the semester.

   Null Hypothesis: those students that take the Entrepreneurial courses at Monmouth University will show no significant differences in their critical thinking skills at the beginning and at the end of the semester. Since all students participate in the entrepreneurial component, there is no experimental group and no control group.

3) Conduct qualitative research and findings regarding the experience of the professors, students, clients and other related participants in both programs.
To test the hypotheses, the author designed experiments with his two marketing classes during the Fall Semester 2011 and the Spring Semester 2012. In addition, similar research studies were concurrently run in the Entrepreneurial Studies classes at Monmouth University in those same semesters, and with another professor at Wagner College in the same marketing course designation as the author in Spring Semester 2012. The measurement tools used were essay-prompts designed by the author of this dissertation using the Collegiate Learning Assessment (CLA) as a guide. The essay-prompt is a cue question purposely constructed for the student to “make an argument” about a topic. Students are instructed to provide justifications and examples to validate opposing points of view (Klein et al., 2007) to assess students’ critical thinking skills. These essay-prompt responses are then scored using the National Science Foundation SOLO Taxonomy based on a seven point Likert scale.

Justification of the Study

The author of this dissertation believes that teaching methods in business classes could be found that would successfully and measurably improve the students’ CT skills, resulting in improved business productivity and improved “customer value,” for colleges and universities. “Customer value” in this case is the ratio between the customers’ perceived benefits of an undergraduate business education and the resources used to achieve an undergraduate business degree. The pedagogical format proposed and researched in this study will not affect the structure of the existing curriculum but, on the contrary, will have the effect of transforming the theoretical construct into practical reality which will make the theoretical content more realistic and meaningful. In addition, it is expected that the investigation’s findings will show how to
redesign existing business curricula and restructure syllabi to impact on business students’
critical thinking skills in future research.

**Limitations of the Study**

There are several possible limitations in this study that are beyond the control of its author, examples are:

1. The number and demographic mix of the students willing to participate in the study may not be representative of the general undergraduate business student population.
2. The length of one semester may be insufficient time to perform the tasks required for measurable improvement in CT skills.
3. The academic schedule attributed to the two different experiential components may not necessarily be aligned with the typical business schedule. For example, the business schedule typically runs at least 9:00 a.m. to 5:00 p.m. and continues to run during vacations, the summertime, spring break, and in many cases, the holidays that are common in colleges. Students are saddled with extra curricula requirements, holidays and breaks that make them unavailable and unable to deliver to the typical time-sensitive business.
4. The variation in the different instructors, as well as the companies involved in the study may affect the research results. Each of the companies involved in the study had a different “scope of work,” with a different business type and different management contacts. This may cause inconsistency in the end result of the study.
5. The essay-prompts used in this research were not tested for reliability and validity, and different essay-prompts might provide different results.
(6) Two Graduate Assistants (GA’s) were used in the scoring of the essay-prompt.

These GA’s are members of the Wagner Business Department each semester, and in every case for this study were Accounting majors. They are selected by the professors in the Business Department and typically work by contract for 20 hours per week in exchange for tuition remission. The Graduate Assistants scorers were given the background of the study, and guidance as to how to score the essay-prompts according to the NSF Solo Taxonomy, but were not specifically expert assessors of critical thinking essay-prompt.

(7) There was no grade incentive for the student to prepare the essay-prompt for either the pre-test or the post-test. There could be a question as to whether the students were motivated to do their best.

(8) The essay-prompts were given to the students at the beginning of the semester, called pre-test prompts, and at the end of the semester, called post-test prompts. Celuch & Slama (2002) found that students tend to do better on the pre-test prompts because they think they are better critical thinkers than they really are. If this finding is correct, it would reduce the statistical significance of post-test scores when compared to the presumed inflated pre-test score.
Chapter 2: Literature Review

Is Teaching Critical Thinking a Way to Make Business Schools More Relevant?

One of the main problems regarding teaching critical thinking skills is that there are different conceptualizations of the meaning of CT itself (Cook et al., 1996) and the institution of a wide variety of methods to accomplish the teaching of CT skills. In other words, different educators have different definitions for critical thinking and practice entirely different teaching methods. Celuch, Black, and Warthan (2009) believe that much of the extant literature emphasizes techniques tied to implementing critical thinking approaches, while questions exist regarding the processes by which students are influence through participation in critical thinking pedagogies. Students with strong and positive attitudes regarding critical thinking will have strong normative beliefs associated with the skill, and these beliefs, in turn, will affect self-identity as a critical thinker (Celuch et al., 2009).

L. G. Snyder and M. J. Snyder (2008, p. 91) similarly suggest that “students should be thinking about their thinking.” They also assume that: “people who can hear don’t always listen, people with the ability to learn, don’t always think critically.” They also assume that students don’t know “how” to think critically.

The Society for Human Resources study (Casner-Lotto, Rosenblum, & Wright, 2009) asserts that critical thinking and creative skills are not being taught by employers in general, which indicates an extant need to develop these skills by the business educators within the classroom. While valuing all of the above mentioned approaches to engage business students in critical thinking, and those mentioned in the definition of WBL, the author of this dissertation believes that integrating an experiential component into the syllabus of business classes is essential. This idea is the central theme of this dissertation.
What is the Current Status of Business Education in General?

The National Center For Education Statistics, 2012 (NCES), reported that between 2000 and 2010 university student enrolment for all courses increased 37%—from 15.3 million students to 21.0 million; this is an average exponential increase of 3.2% a year (National Center for Education Statistics, 2012). Approximately, 58 percent of first time, full time students who began seeking a bachelor’s degree in fall 2004 completed a bachelor’s degree at that institution within 6 years. Completion rates varied at different Institutions. Students at Private non-profit institutions had a graduation rate of 65%, compared with Public Institutions at 56%, and private for-profit institutions at 28%.

According to Collis et al. (2001), at the turn of the millennia, business education in US colleges and universities was the largest field:

- Bachelor’s: 20% business degrees
- Master’s: 25% business degrees

US schools awarded over 85% of all business degrees in the entire world. With such a large portion of college education catering to business there is a risk that the competition among business schools (and other higher education alternatives) will grow and develop pressure to make their students happy, and will encourage policies that will reduce the value of the business education (Doria, Rozanski, & Cohen, 2003). Colleagues at Wagner College have observed this trend recently, where there is growing pressure from students who want to negotiate syllabus requirements and are challenging grades at an increasing rate.

As an example of the changing higher education environment in the U.S., the school with the highest enrolment in 2010 was the University of Phoenix on line Campus with 308,000 students (National Center for Education Statistics, 2012). According to the Department of
Education, Science and Training (DEST) (2007), there are five groups already offering competition to the traditional business schools:

1. Private education firms
2. Technology firms
3. Other corporations
4. Consulting firms and

Pfeffer, a Stanford University Professor of Organizational Behavior at the Graduate School of Business and Fong, his PhD. candidate believe that the college business education has become reduced to a “path to career security and financial riches” (Pfeffer & Fong, 2004, p. 5). Rynes, Trank, Lawson and Ilies (2003, p. 270) have stated “business students are more likely than almost any other students in small Liberal Arts Colleges to view their education primarily as a stepping stone to lucrative careers.” Since this research is offering a pedagogical alternative to the path noted by the above authors, it is important to note the diversity of the background of views from these six authors. In addition to Jeffrey Pfeffer and Christina Fong, Dr. Sara Rynes is the John F. Murray Professor of Management and chair of the Department of Management and Organizations at the University of Iowa. Dr. Christine Quinn is a visiting assistant professor also at the University of Iowa, and her research examines institutional processes and applications of symbolic interaction theories in organizational studies. Anne Lawson graduated with honors and high distinction from the Tippie College of Business. At the time of the publication of this article, she was a sales associate at Aventis Pharmaceuticals. Remus Ilies was a doctoral candidate at the time of the publication, with research focus on personality, individual differences, and behavioral genetics; emotions; affect and attitudes; motivation and self regulation; and leadership.
Accordingly, these views suggest that business schools are under pressure to live up to their promises by delivering improved earning power and jobs. On the contrary, both businesses and business educational institutions recognize the educators’ responsibility to provide knowledge and skills that fulfill, at the same time, the students’ expectations to be able to obtain a better job with higher pay and the expectations of the businesses to hire graduates ready to perform their function with high efficacy.

To further exemplify the importance of the ability of an educational institution to deliver earning power to its students, there have been a number of controversies reported regarding Knightsbridge University. Knightsbridge University is not accredited and therefore not officially recognized as an educational institution in Denmark. There have been a number of controversial incidences reported that have affected the earning power of its graduates due to their lack of accreditation. For example, Coleman Nyathi, an official of the South African province of Mpumalanga, was forced to resign owing to the lack of accreditation of his doctoral degree in business administration from Knightsbridge University. In another incident, Michael Meegan, the head of the Irish charity ICROSS in Africa, lost the possibility to collaborate in a proposed grant of $2.5 million because of his unrecognized PhD. Tom Hulse, Chief Engineer and Fire Protection Services Manager at Indiana University-Purdue University Indianapolis, used a bachelor’s degree from Knightsbridge to qualify for his position. He was later accused of an ethics violation (Chapman, 2007).

**What is the Role of Colleges and Universities in Business Education?**

The real question concerning the role of colleges and universities in business education is two sided. One side of the question is, do business schools give students a set of skills over the long term that is going to serve them over their career? The other side of this question, however,
is do business schools give students a set of skills that allow them to improve business growth and productivity within their chosen field? The following concepts appear in literature as a guideline for business education. According to Doria et al. (2003) the role of colleges’ business education is becoming more of a screening and placement service. Business schools are playing the role of sorting out, from the general population, those that are more ambitious, more energetic, and more willing to subject themselves to years without income. The effects of colleges and universities becoming a sophisticated screening device carry implications. It becomes more important for the student to “get in” to the appropriate college, because very few flunk out or receive poor grades after they are accepted. The students therefore focus on social influences, networking and extracurricular activities. There is continual pressure from external stakeholders as well as from the U.S. Department of Education for more public accountability within colleges and universities. This pressure has been steadily increased during the last decade (Banta, 2001; Dungan & Mundhenk, 2006).

The real meaning of higher business education however, is teaching the appropriate domain knowledge and business application skills. When analyzing the results of the National Association of Educational Progress (NAEP), it was found that students who were taught to make meaning of context while using their critical thinking skills scored higher than those who did not over the course of the four year study. Business instructors in colleges introduce students to the basics of problem solving, the alternative decision-making techniques, the economic principles of the marketplace, the marketing and sales processes by which businesses grow management principals, and financial theory. In classrooms, business instructors play an important role in preparing students to become responsible citizens, capable of making the intelligent economic decisions that will benefit their personal success and the success of the
business they are involved in. Modern business schools, according to Mintzberg and Gosling (2002) are all about the teaching of the functions of business yet, their graduates have no practice how to administer that knowledge in a real business environment. These authors also think that business education should open students’ perspectives on business and life in general to become more collaborative, worldly and wise. They also stress that while managers can be created in the classroom, practicing managers can improve their capabilities only in conjunction with experience in the real business world. The American Association to Advance Collegiate Schools (AACSB), the undergraduate business school assessment organization, in their website (http://www.aacsb.edu) state that business executives and faculty members have long recognized that the ability to think critically is an essential skill required of business school graduates throughout their careers. Accordingly, the AACSB shifted the emphasis of its accrediting criteria to include teaching and assessing critical thinking (CT) skills in business education (Peach, Mukherjee, & Hornyak, 2007). The Secretary’s Commission on Achieving Necessary Skills (SCANS) (Kane et al., 1990), an organization of The US Department of Labor, also defined critical and creative thinking as skills needed by industry as educational requirements for entry level graduates as workers to achieve success in their field (Brock, 1991; Kane et al., 1990; Whetzel, 1992). Additionally, the National Science Foundation declared that the acquisition of CT skills is invaluable not only in sciences, but also for the development of well informed citizens and consumers in every field, including business graduates (Reid & Anderson, 2012).

**How Should Critical Thinking Skills Be Taught?**

Critical thinking can be traced back through approximately 2500 years of history, with its deepest roots evident in the work of Socrates, who advocated the use of probing questions to challenge individuals’ confidence in their claims to knowledge.
In his use of critical thinking and reasoning, his unfla
tering commitment to truth and demonstrated through the way he lived his own life, Socrates, 470-399 BCE, set the standard for all subsequent Western philosophy. He left no literary legacy and information about his life and work came from contemporary writers like Aristophanes and Xenophon. During his youth when a pupil of Archelaus, Socrates was very interested in the scientific theories of Anaxagoras, but later abandoned these to investigate the development of moral character.

He was a soldier of some distinction at Delium and Amphipolis during the Peloponnesian War, after which he became involved for a short period in the political disorder that engulfed Athens. He retired from active life to work as a stonemason living with his wife, Xanthippe, and raising their children. After inheriting a small fortune from his father, the sculptor Sophroniscus, he used his independence to devote his energies to developing the practice of philosophical dialogue.

Until his death, Socrates devoted himself to carefree and unbounded discussion with the young aristocratic Athenians, insistenty questioning their unjustified confidence in the truth of popular opinions. However, he did not always offer them any clear alternative teaching and declined to accept payment for his work with students, unlike the professional Sophists. Because of his disdain for material success, many of his students were fanatically loyal to him, although their parents were frequently exasperated with his influence on their children, and his earlier association with opponents of the democratic regime had already marked him down as a controversial political figure.

The Athenian amnesty of 405 BC precluded prosecution of him for political activities, but a jury charged him with corrupting the youth and interfering with the religion of the city.
Socrates was sentenced to death in 399 BC, which he accepted with remarkable grace, drank hemlock and died in the company of his friends and disciples.

Socrates’s philosophical views are best appreciated from the early dialogues of his student Plato, who attempted to give a faithful picture of the methods and teachings of the master although these writings more often express the philosophical positions Plato himself developed long after Socrates’s death. In the Socratic dialogues, his extended conversations with students, friends and statesmen were aimed at the understanding and achievement of virtue through the application of a dialectical method employing critical inquiry to undermine the plausibility of widely-held doctrines. Socrates believed that we should ignore the illusion that we comprehend the world perfectly and honestly, and accept our own ignorance. These, he stressed as vital steps toward the acquisition of genuine knowledge, by discovering universal definitions of the key concepts governing human life.

For example, when interacting with an over-confident young man in Euthyphro, Socrates systematically refutes the superficial notion of moral rectitude as doing whatever is pleasing to the gods. He argued that efforts to define morality by reference to any external authority will collapse in a logical dilemma about the origin of the good.

Plato’s Apolohma (Apology) is an account of Socrates’s unsuccessful speech in his own defense before the Athenian jury; it includes a detailed description of the motives and goals of philosophical activity as he practiced it, together with a passionate declaration of its value for life. During Socrates’s imprisonment he responded to friendly efforts to secure his escape by seriously debating whether or not it would be right for him to do so. He concluded that a citizen—even when the victim of unjust treatment—can never be justified in refusing to obey the laws of the state.
Whether or not virtue can be taught, leads to an investigation of the nature of virtue. Although Socrates’ answer was that virtue is not teachable, he proposed the doctrine of recollection to explain why we are nevertheless in possession of significant knowledge about such matters. Socrates argued that knowledge and virtue are so closely related that no human agent ever knowingly does evil: we all invariably do what we believe to be best. Improper conduct is the product of our ignorance rather than a symptom of weakness of the will. Socrates’ observations and ideas have continued to influence the thinking of modern educators and was specifically used in works of Dewey (1938), and more recently by (Paul, Willsen, Binker, & Foundation for Critical Thinking, 1995) and Ennis (1996), to name a few. These authors emphasize the significance of critical thinking for actively engaged education and citizenship (Celuch et al., 2009).

It is apparent that many educators, assessment organizations and commissions believe that critical thinking skills are important, and that they can be taught (Giancarlo & Facione, 2001; http://www.aacsb.edu). As it relates to more general concepts of student learning, Facione (1990) states that if students are to be successful in developing a deeper sense of critical thinking they must develop the appropriate mental disposition (traits of mind) in order to apply those particular skills and abilities. This idea is also reinforced in later publications (Giancarlo & Facione, 2001; Paul et al., 1995). An implication of this line of thinking is that students must come to see themselves as a critical thinkers, that is to develop a “critical thinking identity” (Celuch et al., 2009). According to Charng et al. (1988) through a process of internalization, identity theory predicts that self-identity tied to behavior becomes a more prominent aspect of an individual’s overall self-concept, thus increasing in importance as a source of future action as well as a consistency of action. Celuch et al. (2009) suggest that the students’ combined attitude
toward critical thinking will ultimately affect their motivation to integrate critical thinking into their lifelong learning. Further, they hypothesize that students with strong and positive attitudes regarding critical thinking will have strong normative beliefs associated with the skills. This introduces the importance of motivation into the learning process, primarily driven by the students’ assessment of the norms of significant others in their life. In their discussion section, they suggest that future research should explore behavioral norms, or what significant others are doing, and how that affects the students’ motivation. However, questions do still exist regarding the process by which students are influenced through participation in critical thinking pedagogies (Celuch et al., 2009).

One limitation in the success of teaching CT skills, according to Celuch and Slama (2002) is that CT literature does not show large increases in skill disposition assessment for class intervention. It needs reinforcement of multiple iterations and presumably multiple semesters. He also suggests that when doing CT research via the recommended method of a pre-test and post-test research procedure, the method used in the research used in this dissertation, pre-testing is often inflated because the students seem to feel they are better critical thinkers than they really are. It is also generally found in the literature that critical thinking is enhanced by leader support and coaching during the process (Smith-Jentsch, Salas, & Brannick, 2001). It is important here to note that the teachers of critical thinking should also be students of critical thinking, and will be even more effective in their approach if they naturally apply critical thinking in their career and in their classroom. Reid (2010) definitively showed in her research that CT skills could be taught and learned in the course of one semester. However, in her conclusions, she still suggested that future research needs to be conducted in different business educational environments to confirm her findings. In contrast, Arum and Roska (2011) studied the progression of critical thinking
skills of over 2300 students across 24 four-year-institutions that took the Collegiate Learning Association (CLA) exam in their freshman year, in 2005, and again two years later in their sophomore year, in 2007. According to their findings, in the first two years of college education, students on average improved their test results only modestly. Their findings indicate virtually no variances in the critical thinking score results over the course of the first two years of college. In other words, there was a seven percentile aggregate point gain in combined learning skills. In looking at their results in another way, the authors found that 45% of the students showed no significant gains in learning over the first two years of college.

The main question seems to be reduced to how to teach critical thinking skills in the colleges and universities. Winn (2004) emphasizes the failures in teaching critical thinking skills while Case (2005, p. 45) ardently states that “he is disheartened by the failure to teach critical thinking”. Willingham (2007, p. 8) even goes a step further by asking, “Can critical thinking be taught?” Rhetorically then he answers: “Not Really.” On the contrary, it is also generally found in the literature that critical thinking could be enhanced by leader support and coaching during the CT learning process (Smith-Jentsch et al., 2001). According to Facione (2007), CT skills could be taught using a method that he developed and named to be the IDEALS method, which includes:

- Identify the problem
- Define the context
- Enumerate the choices
- Analyze the options
- List the reasons
- Self-correct

According to Mintzberg and Gosling (2002), CT learning occurs where concepts meet experiences through reflection. They found that learning CT skills becomes more powerful when it connects interesting ideas to lived experiences. Both the marketing experiential component and
the entrepreneurial studies start-up component in this research were designed with this idea in mind. Mintzberg and Gosling also make the point that reflection on experiences is actively wondering, probing, analyzing, synthesizing and the struggling work of the mind. As another example of how the literature findings were integrated into the research of this dissertation, the role of reflective thought was designed into the study in a number of ways:

1) The participating students are asked to be reflective with the instructor throughout the process of negotiating their scope of work for the semester,

2) The participating students in follow up meetings are asked to discuss the responses of client representatives to business proposals and initiatives,

3) And in each teams’ final presentation to their client representative, they are asked to reflect upon what had been accomplished by the student collaboration and to delineate the gains afforded to their business partner from the perspective of the client. Since the client’s representative is often in attendance for the final presentation, the students are ill advised to claim accomplishments that were not fully achieved.

How Should Critical Thinking Skills Be Assessed?

In assessing the teaching and learning process of CT, the real question is what the students’ actual process of critical thinking was and how the end-product of high level critical thinking could be measured properly. There are a number of college assessment agencies including, for example, the Collegiate Learning Assessment (CLA), the Collegiate Assessment of Academic Proficiency (CAAP), the Measure of Academic Proficiency and Progress (MAPP) and the Voluntary System of Accountability (VSA) (Arum & Roksa, 2011). When high-level critical thinking is measured, the assessment tool should include the following criteria (1) Clarity (2) Accuracy (3) Precision (4) Relevance (5) Depth (6) Breadth (7) Significance (8) Logic and
(9) Fairness. One of the prominent tests used in modern research is The California Critical Thinking Standardized Test (CCTST) created by Facione (1990). Facione established a collaborative group of experts called the Delphi panel. This panel created the CCTST as a standardized test. Contrary to expectations, CCTST was not an especially strong indicator of performance in business classes in general. Findings also indicated that there were no significant differences among different business majors, including Entrepreneurial/Management majors. However, while the test did not find a strong relationship with the specificity of a course or the curriculum, SAT scores were the only scores that correlated with the improved CT scores. Bycio (2009) suggested this result might indicate that the improved scores correlate with test taking ability rather than to the CCTST testing.

Other common CT tests in use include: Assessment of Reasoning and Communication (ACT), California Critical Thinking Skills Test (CCTST), ACT CAAP Critical Thinking Module, ACT COMP Objective, Cornell Critical Thinking Test, College Based Matrix and Long form, Ennis Weir Critical Thinking Test, ETS task in Critical Thinking, and Watson-Glasser Critical Thinking (Cook et al., 1996).

Peach et al. (2007) recognizes that assessment is the new wave in undergraduate education. They also relate to assessment as an ongoing journey, implying that a single semester may not achieve a significant student result or positive outcome. The teaching and learning of CT skills requires a time commitment from the stakeholders, and an allocation of time and resources. Peach et al. also share their critical views of the assessment process that a reliable rubric is difficult to prepare, and assessments across multiple instructors are complex. CT intervention requires champions, and that change starts at the micro level and builds to the macro level over time. The attempt to assess CT skills cannot be influenced by typical institutional
politics and must be honest. In other words, it must be done correctly with a minimum of internal politics to succeed. Most assessments of the CT skills in the literature are being done in the senior capstone courses (Bycio & Allen, 2009; Peach et al., 2007; Reid & Anderson, 2012).

**What Approaches Can Be Attempted to Improve Critical Thinking Skills if One Were to Establish This as a Primary Objective in Business Education?**

Pfeiffer and Fong (2004) put forth that one of the many important roles of business schools apart from developing important, relevant knowledge is to also serve as a source of critical thought and inquiry about organization and management and business in general. Concurring with this view, this author believes if business schools would accept critical thinking as a primary pedagogical requirement, they would advance the general public interest and improve the public’s perception of the value of the college education. In the above view, “the essential role for business schools might be the development of students’ critical thinking and analytical abilities” (Pfeffer & Fong, 2004, p. 8). As stated earlier, many of the other scholars of business education (i.e. Facione, Enis, Halpern) assessment organizations (i.e. AACSB, NCES) and government oversight agencies (i.e. U.S. Department of Labor) trust that the teaching and learning of critical thinking skills is the main component required to improve our future executives and business leaders. Therefore, an improved critical thinking skill among new business hires is believed to result in improved creativity, innovation and productivity of the workplace (Celuch & Slama, 2002; Ennis, 1987; Halpern, 1997; Winn, 2004).

Not surprisingly, research indicates that lecturing is not the best method of instruction in business (Broadbear, 2003; Brodie & Irving, 2007). Heuristic techniques, trial and error and experiments work better than lectures (Snyder & Snyder, 2008). However, four barriers seem to impede the CT integration process in a business program
(1) Lack of training by instructors.

(2) Lack of sufficient information regarding the teaching of CT skills.

(3) Existing preconceptions about teaching and learning by both instructors and students.

(4) Time constraints for both instructor preparation and the current curricular semester limitations (Snyder & Snyder, 2008).

While one of the key components in teaching CT is the course execution and the individual instructor, Peach et al. (2007) and L.G. Snyder and M.J. Snyder (2008) conclude that business instructors are reluctant to change their traditional teaching style to more relevant CT pedagogy. The implantation of this pedagogy would include using instructional strategies that actively engage the student in the application of content, focusing instruction on the process of learning, and using assessment techniques that are intellectually challenging and motivating.

Hernandez-March et al. (2009) suggest that in a business class, students must take a more active role in their education. This will also impact their attitude and motivation in the classroom (Curran & Rosen, 2006; Young, 2005). Critical thinking involves business students’ personal discovery of information beyond that which is covered in the classroom (Nokes, Dole, & Hacker, 2007). There are a number of examples from the literature of methods of teaching CT skills in the business classroom. Some include collaborative learning (Yazici, 2004). Ngai (2007) documented that using a project based team approach for undergraduate e-commerce activity in his business class would enhance students CT activities. Celuch et al. (2009) performed research which correlated CT skills with self-identity of his business students. He designed his research around a process of modeling CT and holding the students responsible for improving their individual critical thinking. Peach et al. (2007) used a series of case studies to assess CT skills among business students, as well as a total enterprise computer simulation in a business capstone
course. Reid and Anderson (2012) conducted an experimental study in a Mid-Western University, using two experimental groups and one control group. As with many of the other studies mentioned above, this research was also conducted with senior business capstone class students. Reid and Anderson used the Halpern construct and structure as presented in *Critical thinking across the curriculum* (Halpern, 1997), and translated it for ease of use in a business class. Hannon, McBride and Burns (2004) developed a CT module in an undergraduate business program that used in class experiential exercises to enhance students’ decision making and conflict resolution skills.

**Would Embedding CT Pedagogies Into Business Curricula Enhance the Value of College Graduates in the Eyes of the Employers?**

The literature is full of examples of surveys that indicate that the current cohort of undergraduate business students and graduates lack the critical thinking skills required by the business workplace (Arum & Roksa, 2011). For example, Hernandez-March, Del Peso, and Leguey (2009) interviewed employers who expressed their dissatisfaction with their recent generations of employees with business degrees as compared to prior generations. The survey indicates that they believe there is a degrading quality of business education. They assert that new generations of business graduates have been brought up in a protected environment, where they have everything given to them without much effort. They dub them the “Peter Pan Generation.” The problem is further exacerbated owing to the economic recession of 2007/2008; where undergraduate college students are now competing with experienced, older workers for the open positions (Casner-Lotto et al., 2009). In the March 2011 study by the Peter Hart Research Associates named “Across the Great Divide” (Bridgeland et al., 2011), more than 53% of employers say that their companies face a fair or very major challenge in recruiting
competent, entry level business graduates as employees. At smaller companies, an even larger 67% report experiencing the same challenge. While small businesses are currently providing more than 50% of new job opportunities, they are finding a significant skill gap between actual and expected problem solving/critical thinking skills of their new hires. In the Hernandez-March survey (2009), the most important skill mismatch was found to do with decision making incapability that is based on the inability to resolve problems. To illustrate the different perspective of employers and academic leaders, in the same study, 56% of employers believe that colleges should place a greater emphasis on preparing graduates for success in the workplace as opposed to core academic knowledge. Academic leaders in business education, on the other hand, believe that core academic skills should be the priority (64%). The following quotes come from the Civic Enterprises study *Across the Great Divide* (Bridgeland et al., 2011) and represent opinion leaders in the academic community. Paul Lingenfelter- the president of The State Higher Education Executive Officers Association says, “the skill gap is growing because (a) the skills required in the work force are growing and (b) the educational system has been coasting” (p. 8). According to William Bowen, former President of Princeton University, “too much discussion is focused on initial access, rather than attainment” (p. 9). Robert Schwartz, Academic Dean of Harvard University Graduate School of Education believes that, “school learning is abstract, theoretical and organized by discipline, while work is concrete, specific to task and organized by problems and projects” (p. 12). While agreeing with all the above cited leading opinions, it appears to be clear that the connection between the requirements to be “abstract” and “concrete” at the same time is the ability to think critically in the field based on the “learned” and the “task related activity.” In a US Conference Board article titled “The Ill Prepared US Workforce” (Casner-Lotto et al., 2009) the Board found substantial gaps in training for CT and creativity
skills that are crucial to companies’ ability to compete in the global marketplace. Moreover, the Hernandez-March (2009) study says that the common complaint among interviewed employers was the lack of a practical approach in higher business education. Similarly, Cotton (2001) also reports that based on the literature surrounding employability, employers are not satisfied by the non-technical abilities or employability skills exhibited by college graduates. They express their deep concerns regarding this deficiency. In another study, Andrews and Higson (2008) found that specific employer expectations are that the graduates need to demonstrate problem solving skills, and an ability to think in a critical and analytical manner. This lack of practicality is sometimes attributed to the traditional distance of full-time faculty members from professional practice. It stands to reason that if one would bring real practical experiential approaches into higher business education and combine it with core academic knowledge, it may help to teach the current cohort of students the critical thinking skills currently desired by employers.

Should Colleges and Universities Be Teaching Only Domain Knowledge, Business Application Skills, or Both?

Domain knowledge is the factual information about the environment in which business organizations operate, and it encompasses understanding of the industry dynamics, history, sectors and segments, business model, competitive landscape, value and supply chains, customers, challenges and the industry-specific strategies of the enterprise. Domain knowledge is of a particular industry.

Business application skills are keenness and quickness in understanding and dealing with a business situation in a manner that is likely to lead to a good outcome. They usually include knowledge and understanding of financial, accounting, marketing and operational functions of an organization.
Modern business application skills utilize any software or set of software programs to perform various business functions. These business applications are used to increase productivity, to measure productivity and to perform business functions accurately.

It is the contention of this author that both domain knowledge and application skills can and should be taught within the same upper level undergraduate classes. But first we will explore the literature to assess the degree to which other scholars have had success in teaching CT skills, and if so, are these pedagogical methodologies an adequate way to make business education more relevant to existing market requirements.

What is the Significance of Critical Thinking with a Particular Perspective Toward Business Marketing?

The significance of Critical thinking for marketing in particular has been well documented (Catterall, Maclaran, & Stevens, 2002; Celuch et al., 2009; Celuch & Slama, 2000; Easton, 2002). Some examples of specific tools and techniques used in marketing classes to improve CT skills include: (1) debate (Roy & Macchiette, 2005) (2) case analysis (Klebba & Hamilton, 2007) (3) keeping journals (Aitken & Deaker, 2007) and (4) complete curriculum revision (Wee, Kek, & Kelley, 2003). Celuch and Slama (2002) demonstrated that students participating in a semester-long marketing class using critical thinking pedagogy can show significant positive pre-test to post-test change in self-identity related to critical thinking.

According to Brookfield (2012), an expert in the field of higher education, critical thinking is a universal survival skill which helps facilitate peoples’ path through life and the overall purpose of education is to teach the students think critically. All action is based on the theory of the decision maker. But the key point is that all educational theory is made more understandable if the student can relate to the experience. Brookfield believes, as does the author
of this dissertation, the best way to teach critical thinking is through direct experience.

Brookfield stresses that CT is best learned by students when they see it in action. If the instructor is in an experiential situation (such as used in the marketing experiential component used in Wagner Study One) and is able to explain what his/her assumptions are, what alternatives could be explored, and the different perspectives or experiences he/she is using to address a set of marketing issues, the student can be exposed to and immersed in that way of thinking. The more instructors would demonstrate their own participation in critical thinking, and explain to the students what they are doing and/or how they are approaching marketing issues in real life, the easier it is for the students to understand the process (Brookfield, 2012).

This way of teaching also addresses the millennial students’ (previously mentioned “Peter Pan Generation”) need for relevance. This author believes that even if the marketing experiential component as defined by the agreed scope of work is not specifically dealing with an issue of relevance to the student, the life lessons learned by testing assumptions and applying individual perspectives are invaluable to the efficacy of life. This can lead to an improvement in the student’s self-esteem, self-concept and/or self-confidence (Johanson, 2010). As far as implementation of critical thinking into the syllabus, college faculty, who are charged with teaching critical thinking to students, are generally given virtually no training or guidance in meeting this critical education objective. Literature research suggests that students are more apt to engage in critical thinking when professors actively foster an intellectual ethos, or the distinguishing character that enhances the students’ disposition toward critical thinking (Tsui, 2008).

More specifically to an advanced marketing class, Celuch and Slama (2000) conducted a study to test improvement of critical thinking skills in their students in their consumer behavior
marketing course, which is the same course used in the Fall Semester 2011 by this author. Dr. Kevin Celuch is a professor of Marketing at Illinois State University, and his research interests focus on communication effects, measurement issues and consumer processes. Mark Slama is a D.B.A and is also a professor of Marketing at Illinois State University. His research interests focus on consumer involvement, self presentation and the study of marketing mavens. In their article, they introduced an approach to teach critical thinking skills in their marketing courses. In stark contrast to the experiential components embedded in the courses of this dissertation, Celuch and Slama used the approach espoused in the work titled “Learning the Fundamentals of Critical Thinking” (1997). This resulted in a syllabus using a series of questions to monitor the growth in the students’ understanding of critical thinking through different phases:

1) Course Introduction

2) Cognition – Involvement/Knowledge/Attitudes/Decision Making

3) Behavior

4) Environment – Culture/Social Class/ Reference Groups

5) Ethics

6) A Summary Project (reflection)

They used comparisons of the end of semester student evaluation scores for their experimental class as compared to student evaluation scores of their previous consumer behavior courses without the critical thinking focus.
Chapter 3: Research Design and Material and Methods

Research Designs for Two Experimental Business Classes with Different Experiential Components

This thesis is built on the results of two different experimental business classes (course designation MK 301 and MK 311) at Wagner College and the two classes of the Entrepreneurial Division of Monmouth University (course designation BM 451 and BM 434). In the two Wagner College classes (later referred to as Wagner Study One), a marketing experiential component was introduced to the syllabi for those classes. In the Monmouth University research (later referred to as Monmouth Study Two), similar research was conducted with the experiential component being the selection and launch of an entrepreneurial start-up project within the syllabi. The research for both Wagner Study One and Monmouth Study Two was conducted concurrently for each of the classes in the Autumn Semester 2011 and the Spring Semester 2012. The research design for each of these studies was tested and revised by Pilot Study One in Autumn Semester 2010 for Wagner Study One and by Pilot Study Two in the Spring Semester 2011 for the Monmouth Study Two. Below is Table 1 to simplify the above:
Table 1

*Summary of the Semester, Study Name, research Location and Course Designation for Wagner Study One and Monmouth Study Two*

<table>
<thead>
<tr>
<th>Semester</th>
<th>Study Name</th>
<th>Research Location</th>
<th>Course Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2010</td>
<td>Pilot Study One</td>
<td>Wagner</td>
<td>MK301</td>
</tr>
<tr>
<td>Autumn 2011</td>
<td>Wagner Study One</td>
<td>Wagner</td>
<td>MK 301</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>Wagner Study One</td>
<td>Wagner</td>
<td>MK 311</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester</th>
<th>Study Name</th>
<th>Research Location</th>
<th>Course Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2011</td>
<td>Pilot Study Two</td>
<td>Wagner</td>
<td>MK 420</td>
</tr>
<tr>
<td>Autumn 2011</td>
<td>Monmouth Study Two</td>
<td>Monmouth</td>
<td>BM451/434</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>Monmouth Study Two</td>
<td>Monmouth</td>
<td>BM451/434</td>
</tr>
</tbody>
</table>

Therefore, the initial portion of the Materials and Methods section will be organized as follows:

- Background for the overall research design
- Background for Pilot Study One
- Research Design for Pilot Study One- this represents an explanation of the research design and design refinements made based on a Pilot Study One conducted in the consumer behavior class at Wagner College in Autumn Semester 2010
• Research Design for Wagner Study One – the resulting research design for the actual research conducted in the consumer behaviour class in the Autumn Semester 2011 and the advertising class in the Spring Semester 2012 by the author of this dissertation at Wagner College

• Background for Pilot Study Two

• Research Design Pilot Study Two – this represents an explanation of the research design made in collaboration with Professor Buzza of Monmouth University and conducted in the strategic marketing class at Wagner College in Spring Semester 2011

• Research Design for Monmouth Study Two - the resulting research design for the actual research conducted at Monmouth University in the Autumn Semester 2011 and in the Spring Semester 2012 by Professor Buzza at Monmouth University

**Background for the Overall Research Design**

For each of the two research studies, referred to as Wagner Study One and Monmouth Study Two, a pilot study was conducted to test and challenge the initial research design. The pilot study for Wagner Study One served as the initiation of the research conducted in the Autumn Semester of 2010 in the consumer behavior class (course designation MK 301) of this author. The actual research for Wagner Study One was conducted in the consumer behavior (course designation MK 301) class during the Autumn Semester 2011 and in the advertising (course designation MK 311) class during the Spring Semester 2012 (a full syllabus for each class is attached as Appendices F and G). In summary, both classes are advanced classes in the marketing concentration of the business department at Wagner College. The consumer behavior class is a study of theories related to consumer behavior as part of the consumer buying process.
Topics discussed include assessing needs, attitudes and beliefs, and cultural, family and reference group influences. There is a basic marketing prerequisite (course designation MK 201) and the students are either undergraduate juniors or seniors. The advertising class is a study of various aspects of advertising which pertain to individual and group behavior in the consumer buying process. Topics discussed include the design of advertising messages and the effective choice of media to deliver that message as it is related to promotion, personal selling, publicity and public relations. There is also a basic marketing prerequisite (course designation MK 201) and the students are either undergraduate juniors or seniors.

The syllabi (for MK 301 and MK 311) includes and covers the same number of chapters from the text as the author usually covered when previously teaching these classes, and the content covered in the class is the same as the content of the same course taught by this author in the semesters prior to this research. The course was designed not to trade-off domain knowledge for experiential knowledge, but to insert the experiential component into the syllabus instead of the traditional final exam, with the remainder of the course remaining the same. The intent was to isolate the experiential component as the only element of the course that would change. This was designed to objectively isolate the experiential component as the only factor that would affect the scores for the students when they answered the pre and post-test essay prompts. The essay-prompt method was chosen to distinguish the critical thinking skills based on the scores of those students that did participate in the experiential component from those that did not. Care was taken to be sure the students received sufficient training in the market knowledge of their business client and in the relevant course content before the marketing deliverables of the experiential exercise were delivered to the client and completed.
The author chose to test his research design in Wagner Pilot Study One in the Autumn Semester 2010 by introducing an experiential component into the consumer behavior class he had been teaching regularly at Wagner College for a number of years. This project was selected for his dissertation because:

1) He had always believed in the concept of “learning by doing” in both his executive and academic careers, and had been involved since 2005 in the pedagogical application of the Wagner Plan (Experiential Learning through Learning Communities) and in his participation in the Teagle Foundation grant to study the value of “Learning by Doing” (“Wagner Plan for the Practical Liberal Arts,” 2012).

2) As Director of External Programs at Wagner College, he was convinced that the skill gap between undergraduate business students and the needs of employers was considerable. The majority of the literature reviewed for this dissertation supported this presumption.

3) From his extensive literature review of “learning by doing,” he had been persuaded that teaching of critical thinking to undergraduate business students was an essential component to bridging this skill gap, and to also increase the value of a proper undergraduate business education.

4) While the literature had described many methods of attempting to test the assessment of students’ critical thinking skills, the author had found no comparable research with the use of an experiential component.

5) The author had already used project based learning, extensive case studies, mock negotiation classes, and civic engagement experiential learning in his previous classes at Wagner College. In the process of trying to design an experiential learning component that would be appropriate for this research design, there were inquiries by local
businesses (potential clients) to the author for marketing assistance, often requiring a team of students. As a result of meeting with these potential clients, the author was able to refine the specific characteristics of the experiential component that could work for the students, the clients and the instructor. The number and variety of these inquiries also encouraged the author that there was sufficient client demand in the marketplace to conduct the ongoing research.

6) The author wanted to develop a seminal class design that would provide students with improved critical thinking skills through the use of an experiential component that would be developed in such a way that it could be utilized with a minimum of adjustment by other instructors in other business disciplines in similar universities.

7) Since the literature review did not have a consensus on the efficacy of the various critical thinking tools, the author decided to create his own research tool on the basis of his previous experience through the Teagle study with essay-prompts and scoring based on the National Science Foundation (NSF) Solo Taxonomy.

Consequently, the author chose to initiate his research design in Autumn Semester 2010 in Wagner Pilot Study One using two companies that had been referred to him by Wagner College colleagues, and created two essay-prompts designed for that marketing class using the NSF scoring grid with a seven point Lickert scale as the scoring tool. As stated above, the author had considerable experience administering, creating and scoring essay-prompts because Wagner College was one of the several educational institutions participating in the Teagle foundation grant for a college-wide Collegiate Learning Assessment (CLA) study of the topic, “Learning by Doing: Assessing the relationship between Liberal Learning and Experiential Education.”

According to their website, the Teagle foundation intends to be an influential national voice and
a catalyst for change in higher education, particularly to improve undergraduate student learning in the arts and sciences (Teagle Foundation, 2010-2012). The author was a part of that foundation grant study representing the business department. The author’s participation included proctoring the CLA exams for undergraduate business seniors, as well as receiving ongoing training for the creation of essay-prompts, and suitable scoring techniques using the NSF Solo Taxonomy grid (Appendix K). While others have pointed out and it has been acknowledged that some improvements to the grid could be made to improve the accuracy and reliability of the scoring, this grid was developed and improved during wide-ranging educational projects by the National Science Foundation during many years of input.

Wagner College was one of the several educational institutions participating in the NSF’s Critical and Civic Thinking (CT2) study, so it was only natural for the author of this dissertation to use this instrument for evaluation. The following is a brief description of the evolvement and usefulness of the NSF SOLO Taxonomy. According to Spicer and Hanks (1995), while in the past “at least” seven critical thinking tests and multiple rubrics have been frequently used in pedagogical research, few are readily applied to assess formative learning outcomes in a variety of educational settings. SOLO taxonomy, a “prompt method” (Biggs & Collis, 1982), was selected by many of the NSF grantees because: it is applicable to students at multiple levels (Boulton-Lewis & English, 1998); represents stages of increasing organization and integration of knowledge (Burnett, 1999); has good inter-rater reliability (Biggs & Collis, 1982; Chan, 2002; Hattie & Purdie, 1998) and is useful for both the students and instructors (Biggs & Collis, 1982; Hattie & Purdie, 1998). The essay-prompt can be made very specific to the subject matter. There is no cost or budgetary concerns. It is also easy to scale to other classes and other institutions, like was done in this study with Monmouth University. The Collegiate Learning Association
(CLA) is an accredited assessment organization and the SOLO Taxonomy is the assessment tool of choice for CLA. Similarly, SOLO Taxonomy is used in the book entitled *Academically Adrift*, by Arum and Roska (2011), which was one of the inspirations for the author of this dissertation in designing and furthering this research.

In particular, Solo Taxonomy for Assessing Level of Critical Thinking includes seven levels of critical thinking skills as listed below. In the discussion section, improvements will be suggested that will clarify the scoring grid. However, for this research, the grid was used as published.

1. No Understanding demonstrated. Response does not address the question or restates the question.

2. Limited understanding of topic. Responses focus on one conceptual item in a complex case and are not accurate or partially accurate.

3. Limited understanding of the topic. Response focuses on one conceptual item in a complex case and is accurate.

4. Understanding of several discrete components. Response is a collection of multiple items that are not related within the context of the exercise.

5. Understanding of several components that are integrated conceptually. Response may not prioritize information or be appropriate to the scale of the question.

6. Understanding of several components that are integrated conceptually. Response prioritizes information and is appropriate to the scale of the question.

7. Understanding demonstrated at a level extending beyond what has been dealt with in the question prompt. Response generalizes to situations beyond the scope of the question.
Design for Pilot Study One

The author chose to test his research design in Wagner Pilot Study One in the Autumn Semester 2010 by introducing an experiential component into the consumer behavior class he had been teaching regularly for years. The experiential component introduced was an assignment for two groups of students to negotiate and perform a series of marketing specific projects that a current local company or organization had requested.

For Pilot Study One, two local businesses and organizations (clients) had requested help and were referred to the instructor for consideration. The Instructor met with each of these clients to ascertain exactly what marketing support they were seeking, whether the majority of the potential scope of work was consistent with the objectives of the consumer behavior course, and whether a team of students under his supervision (while the instructor acted as an account manager) had the capability to fulfil those projects within a single semester. (A sample team selection questionnaire and client offering used in this research are included as Appendices H and I). In the early part of the semester, the instructor explained to the entire class the purpose of the research, his assessment of the type of businesses, and the perceived requirements of the client. He then offered the students the opportunity to participate in the experiential component, and perform as part of that marketing team (called the marketing incubator group at that time) instead of taking the typical take-home written exam. In order to reduce any bias, both their grade for participating in the experiential component and for the typical final exam was worth the same 20% of their final grade. The remainder of the syllabus was identical.

Students who chose not to participate on a team were given the typical take-home final exam for that course and served as the control group. For the participating students (experimental group), emphasis was placed on both the students and clients to establish a clear “scope of
work,” defining and listing specific marketing objectives and deliverables, and presenting students’ findings to the client at the end of the semester (Sample Statement of Work (SOW) attached as Appendix J).

At the end of the semester, students’ critical thinking skills were tested by asking the students to answer essay-prompts designed by the author and scored by using the above mentioned NSF Solo Taxonomy (Appendix K). The essay-prompt for the Pilot Study One is presented below:

Appendix L

MK 301 Autumn Semester 2010 Research Survey and Prompts

Autumn 2010 Research Survey and Prompts

Survey for MK 301

November 29, 2010

In an article titled entitled Advertising: “The Poetry of Becoming” by Theodore Levitt (1993) the author makes the following two comments about advertising

1) “Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace”.

2) “Human behavior is almost entirely purposive. Products are tools people use to get results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes; just alleviate drudgery and heavy labor, just save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be. The same may be said of the personal computer, the tractor, the mutual fund and almost everything else”.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please print neatly in your blue booklet. This paper should contain an appropriate level of sophistication and critical thought.

The procedure for administering the research in class was straight forward. After a short introduction, the author handed out the essay-prompt above along with a traditional college “blue
book.” The author proctored the session, giving the students 20 minutes to complete two essay-prompts. Once the students had answered the essay-prompts, they were collected along with the blue booklets. Immediately after class, these essay-prompts and the blue booklets were delivered to the participating graduate assistants (GA’s), who were charged with scoring and recording the students’ essay-prompt responses using the “NSF SOLO Taxonomy.” The graduate assistant randomly numbered the booklets in order in the top right hand corner from 1 to 18 for identification purposes. She recorded the scores by number on an Excel spreadsheet.

The objective of the Pilot Study One was to test the research design which includes: (1) testing the efficacy of the essay-prompts as an acceptable way to measure students’ critical thinking skills (2) identifying the most effective way to introduce the experiential component into the existing class syllabus and (3) introducing an objective scoring process using the NSF Solo Taxonomy (4) and ascertain from the CT scores that there was no bias in the critical thinking scores for those students that elected to participate in the experiential component and those that did not.

When designing this research, it was understood that critical thinking is one skill, while creative writing is another. Many people can think clearly, some analytically, but this skill cannot be equated with the ability to translate thoughts onto paper. This was overcome to the degree possible by training the graduate assistant (GA) scorer of the prompts to look for keywords when evaluating each student essay-prompt. She was asked to concentrate on evaluating the critical content of the essay-prompt responses by looking for keywords that indicated analytical thought and the ability to handle this and regard elegant prose as an additional minor credit.
Similarly, the students were given only 20 minutes to write their responses to the two essay-prompts and were also asked to focus on their critical thinking as opposed to the writing.

As it relates to the scoring process and the bias in the critical thinking scores in Wagner Pilot Study One was to seek to assess the model to determine whether it is generally applicable. The information listed below is a comparison of a series of two-by-two experimental designs: Condition A is student with the participation in the experiential component; Condition B is student without that experience, referred to as a non participating student or the control group. Result X is objectively improved critical thinking, result Y is no discernible change.

In Wagner Pilot Study One, 18 students were available to write the essay-prompt responses given on November 29, 2010.

Table 2

*The Average Class Scores of Pilot Study One*

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total class</td>
<td>18</td>
<td>6.19</td>
<td>6.00</td>
<td>4.24</td>
<td>3.94</td>
</tr>
<tr>
<td>Condition A Participating</td>
<td>7</td>
<td>6.07</td>
<td>6.00</td>
<td>3.67</td>
<td>4.00</td>
</tr>
<tr>
<td>Condition B Non- Participation</td>
<td>11</td>
<td>6.27</td>
<td>6.00</td>
<td>4.55</td>
<td>3.91</td>
</tr>
</tbody>
</table>

Number of times Condition A exceeded average scores indicating an improvement in critical thinking 2 28.6%

Number of times Condition A did not exceed average scores indicating no improvement in critical thinking 5 71.4%

Number of times Condition B exceeded average scores indicating an improvement in critical thinking 7 63.4%

Number of times Condition B did not exceed average scores indicating no improvement in critical thinking 4 36.4%
In summary, 28.6% of the students that did participate (Condition A) indicated Result X, or an improvement in critical thinking scores, while 71.4% of those that did participate (Condition A) indicated Result Y, or no improvement in critical thinking.

A total of 63.4% of the students that did not participate (Condition B) indicated Result X, or an improvement in critical thinking scores, while 36.4% of those that did not participate (Condition B) indicated Result Y, or no improvement in Critical thinking.

The author interpreted this to mean that there was no bias in scoring between those students that chose to participate in the study and those that did not.

As it relates to the reliability of the graduate assistant (GA’s) scoring the essay-prompts, the author provided the GA with an overview of the purpose of the research, and a copy of the essay-prompt. The author spent time with the GA to look for certain keywords related to each of the 7 Lickert scoring options on the NSF Solo Taxonomy scale. After the GA provided the scores for each booklet, the author assessed the score given to each booklet number and found the scoring to be reasonable in his estimation. At this point, it was discussed whether the GA scorers were the most objective scorers for this study. For the Wagner Teagle Foundation study at Wagner College, the essay-prompts were scored by two trained professors in the field of scoring essay-prompts for critical thinking. When the score was identical, it was accepted; when it was different, the two professional scorers would reread the essay-prompt responses and arbitrate and agree on a score. As a result of this design discussion, it was agreed that, from this point forward, this research would have two GA scorers, and the scores of the two GA’s would be averaged. The inter-rater reliability testing scores performed in the results section of this dissertation indicates an acceptable level of reliability. However, one could put forth the
argument that this decision represents one of the weaknesses of the study, and will be further explored in the discussion section.

The Pilot Study One included two very different experiential clients. One client was a non-profit company, whose mission was to assist unmarried mothers and their children, and the other was a true entrepreneurial start-up company that offered marriage arbitration services.

The former, an organization located nearby in New Jersey, with approximately 12 welfare mothers from Monmouth County in residence, all with between one and two children. Each mother was a full time resident for a targeted transition period of between 12 and 18 months. The mission was to provide interim support for the family while the mother learned life skills, managed a full time job, while sharing the chores of the full time residence with the other mothers. This was accomplished under the supervision of an on-site management team of five or six and the oversight of a Board of Trustees. The latter company, in stark contrast, was a start-up company. The owner/entrepreneur was licensed in the art of marriage arbitration, and was in the process of starting his practice on Staten Island, New York. He was currently the only employee in the company, and had limited resources.

Both companies had the need for a variety of marketing services that they did not have the time or talent to provide on their own.

Key criteria in the selection of these clients included: (1) their geographical location (2) the interest and ability of the client to act as student teacher (3) establishment of a clear “scope of work” (SOW) with specific and realistic marketing deliverables (4) the capability to reconcile the differences in client “real world” business schedules and the more restrictive academic calendar (5) their source of referral to the author of this dissertation.
A random selection was made to provide 15 students in the participating group and 15 in the control group. However, approximately 25% of the Wagner Students are commuters (they do not live on campus), and approximately another 33% participate in the athletic program and have athletic practice and game requirements that would prevent them from participating fully in the experiential component. It was felt that so many exceptions would need to be made that it would not be practical. Also, in consultation with The Wagner Center for Teaching, Learning and Research, the business department chair, as well as other Wagner professors and colleagues involved in the aforementioned CLA Teagle foundation grant studies, the author was advised that while random selection would be preferred, the results of the post-test prompts will indicate if there is a bias between those students that chose to participate and those that did not. It was also a consideration that it would be important to the selected clients that the students were motivated to work with them and their business type, and for the preference of the students (the aforementioned “Peter Pan Generation” from the Hernandez-March (2009) article) to be working on something of interest to them. As a consequence, the students were allowed to volunteer for the experiential component. As shown in Table 3 above, nine students did volunteer. Six selected the marriage arbitration start-up, and three selected the Spring House non-profit organization.

Table 3

*Profile of Pilot Study One*

<table>
<thead>
<tr>
<th>Semester of study</th>
<th>Total # of students</th>
<th># of experiential students</th>
<th># of control students</th>
<th>Instructor</th>
<th>Grader</th>
<th>Grading tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2010</td>
<td>30</td>
<td>2</td>
<td>9</td>
<td>21</td>
<td>DeSimone</td>
<td>2GAs NSF SOLO</td>
</tr>
</tbody>
</table>
Since the findings of the observations in Pilot Study One would be subsequently utilized in the process of designing and implementing the research for Wagner Study One, many of the outcomes are listed here, rather than in the Results section. In summary, these were as follows:

1) Positive findings from the clients and students were obtained. The instructor had an end-of-semester meeting with both clients and related parties to assess their perspective on the efficacy of the experiential component as it related to them. All parties involved were extremely pleased with the results. For example, one Wagner College finance professor, who was associated with the project because she was on the Board of Trustees at the Spring House, played the original work created for the Spring House (a DVD used for fund raising) was so pleased with the output that she played the students’ DVD in our next business department meeting.

As it relates to the students attitude toward the experiential component, an independent mid-semester review (objective course evaluation) was conducted by a Wagner professor outside of the business department to gain additional perspective regarding the procedures surrounding the marketing experiential component. The feedback from that review conducted on October 25, 2010 is attached as Appendix M. In short, a summary of the findings indicate all of the students liked the introduction of the experiential component into the class, and confirmed that many of the non-participating students would have liked to participate if their schedules would permit. To reinforce the students’ assessment of the experiential component, the end-of-the-semester student/instructor evaluations confirm their satisfaction. As it related to the statistical results, the students that participated scored lower than the average class score on essay-prompt one, and
higher than the average class score on essay-prompt two, indicating there was no
particular bias in the selection process.

2) The clarity of the essay-prompts (initial essay-prompts attached as Appendix L), the
amount of time to complete the prompts (20 minutes) and the scoring process using
graduate assistant as a grader were tested and found acceptable by the author and other
objective parties. The scoring of the booklet by the graduate assistant was compared
favorably with scoring of an objective professional scorer of essay-prompts. However, it
was suggested by the business department chair that a second independent graduate
assistant scorer is utilized in the Pilot Study Two, and that the scores of the two should be
averaged. This suggestion was implemented for Pilot Study Two and the remaining
studies.

3) The experiential client selection process was advanced further. For Pilot Study One,
both of the experiential clients were referred to the author by Wagner College personnel
since he was the senior marketing professor. After Pilot Study One, the instructor reached
out to the community, identified specific business types that would provide the optimal
educational experience, interviewed the client representative in depth before the semester
began and evaluated if the talents of students from the class would provide a proper fit for
the tasks requested of the client.

4) The process of offering students multiple clients for a variety of experiential options
was refined. There were only two clients offered to the students in Pilot Study One, but
this was expanded in the actual Wagner Study One to be 5 alternative clients in the
Autumn Semester 2011 and 4 alternative clients in the Spring Semester 2012.
5) The importance of establishing a clear “scope of work” was recognized by the clients and the students.

6) The idea of student presentation to clients was established, and the requirements of the final presentation were expanded to include a formal presentation to the client, and a question- and-answer session afterward.

7) The importance of pre and post-testing (at the beginning and at the end of the semester, respectively) was recognized by the author of this study in conjunction with numerous similar studies from the literature review such as Arum & Roska (2011). For Pilot Study Two and both Wagner Study One and Monmouth Study Two, both a pre-test and post-test essay-prompt was administered to the students.

8) From this point on, the clients were interviewed and selected by the instructor before the start of each semester and they were scheduled to introduce themselves to the students as early in the semester as possible. This permitted the scheduling of the pre-test essay-prompt as early in the semester as possible.

9) The “questionnaire” portion of the original prompt was left for comparison purposes, but no longer used for statistical purposes.
The Research Design for Wagner Study One

Table 4

<table>
<thead>
<tr>
<th>Semester of study</th>
<th>Total # of students</th>
<th># of clients</th>
<th># of experiential students</th>
<th># of control students</th>
<th>Instructor</th>
<th>Grader</th>
<th>Grading tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2011</td>
<td>32</td>
<td>5</td>
<td>18</td>
<td>14</td>
<td>DeSimone</td>
<td>2GAs</td>
<td>NSF SOLO</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>29</td>
<td>4</td>
<td>19</td>
<td>10</td>
<td>DeSimone</td>
<td>2GA’s</td>
<td>NSF SOLO</td>
</tr>
</tbody>
</table>

The client selection process was much more rigorous for the actual Wagner Study One as more time and attention were expended by the instructor to provide a variety of client options. The student selection process was also developed further. In addition to the instructor’s assessment of the client, their type of business, and their projected scope of work requirement, a presentation to the class by the client representative at the beginning of the semester was added. The students were encouraged to ask questions of the client to assess the “fit.”

In the Autumn Semester 2011, the first part of two classes representing Wagner Study One, 32 students were registered for the consumer behavior class (course designation MK 301). Five different companies (clients) had been selected by the instructor and were offered to the students as an option instead of the typical final exam, in an effort to expand participation and remove the potential bias of unequal distribution. Eighteen students (56%) elected to participate with one of the five clients and fourteen students (44%) elected to take the typical final exam. Once it was clear which students were going to participate in the experiential study and which students were not going to participate, the pre-essay-prompt was given along with a college “blue book.” They were not to identify their names. The instructor was the proctor. The essay responses were collected immediately following the 20 minute period and were given to the
Graduate Assistants (GA’s) immediately after the class for scoring. At the end of the semester the same procedure was followed for the post-test with the second set of essay-prompt.

In the Spring Semester 2012 semester, the second of the two classes representing Wagner Study One, 29 students were registered for Advertising (course designation MK 311). Five different companies (clients) had been selected by the instructor and were offered to the students as an option, instead of the typical final exam. Of the five different companies, one company was not selected by any student. This was a non-profit organization designed to encourage local businesses to save energy. The students simply did not seem to be interested in the marketing aspects of this particular potential client. Nineteen (19) students (66%) elected to participate with one of the four clients and ten (10) students (34%) elected to take the typical final exam.

Once it was clear which students were going to participate in the experiential component and which students were not, the pre-essay-prompt was given. The essay-prompt was given to the students along with a college “blue book.” They were not to identify their names. The instructor was the proctor. The essays were collected immediately following the 20 minute period and were given to the Graduate Assistants (GA’s) for scoring. At the end of the semester, the same procedure was followed for the post-test with the second set of essay-prompt. A copy of the beginning and ending essay-prompt used for Autumn Semester 2011 and Spring Semester 2012 in the Wagner Study One are included as Appendices N, O, P, Q, and are also copied below.
Appendix N

Critical Thinking Prompt MK 301, September 2011

“Critical Thinking” Prompt for MK 301 Distributed to the Class on Tuesday, September 20, 2011

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt (1993), the author states the following comments about advertising:

1) Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace.

2) Human behavior is almost entirely purposive. Products are tools people use to get results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes; just alleviate drudgery and heavy labor, just save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be. The same may be said of the personal computer, the tractor, the mutual fund and almost everything else.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please write neatly in the booklet provided. This paper should contain an appropriate level of sophistication and critical thought.

Appendix O

Critical Thinking Prompt MK 301, December 2011

“Critical Thinking” Prompt for MK 301 (December 08, 2011)

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt (1993) the author puts forth the following comments about advertising:

1) Human behavior is almost entirely purposive. Products are tools people use to get
results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes; just alleviate drudgery and heavy labor, just save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be.

2) Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please print neatly in the booklet provided. This paper should contain an appropriate level of sophistication and critical thought.

Appendix P

Critical Thinking Prompt MK 311, February 2012

“Critical Thinking” Prompt for Mk 311 (Spring 2012) Professor DeSimone
Thursday, February 2, 2012

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt (1993) the author puts forth the following two comments about advertising

1) “Actually, advertising is the least harmful form of propaganda-precisely because it is so conspicuously in the service of its source, the sponsor. It is effective on behalf of the advertised product precisely because the sponsor exists to assure the customer of the reliability and credibility of his or her promise, because the sponsor is visibly, eagerly and reliably there to stand behind the product, to give customers the assurance they need to buy in the first place”.

2) “Everybody knows, without help from Ralph Nader, that commercial communications are not engineering descriptions of the real thing. Nobody wants to hear that a perfume is a complex concoction of extracts from the lining of the mollusk and urine from the civet cat, or needs to be told it performs certain practical functions. As with many utilitarian products, people seek not just what they deliver operationally but also (perhaps especially) what they promise emotionally or suggest symbolically. In much consumption we are motivated by hopes greater than what we can deliver reasonably, by wishful possibilities that go beyond the ordinary and transcend reality. In response to such
motivations, advertising supplies exactly what the painter with an easel supplies, not simple photographic reproductions”.

Please critically evaluate separately in the booklet provided at least two different sides or viewpoints of each of the two issues above. Please print neatly in the booklet provided. This paper should contain an appropriate level of sophistication and critical thought. Your responses will be graded by an independent source.

Appendix Q

Critical Thinking Prompt Mk 311, April 2012

“In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt the author puts forth the following comments about advertising

1) “Everybody knows, without help from Ralph Nader, that commercial communications are not engineering descriptions of the real thing. Nobody wants to hear that a perfume is a complex concoction of extracts from the lining of the mollusk and urine from the civet cat, or needs to be told it performs certain practical functions. As with many utilitarian products, people seek not just what they deliver operationally but also (perhaps especially) what they promise emotionally or suggest symbolically. In much consumption we are motivated by hopes greater than what we can deliver reasonably, by wishful possibilities that go beyond the ordinary and transcend reality. In response to such motivations, advertising supplies exactly what the painter with an easel supplies, not simple photographic reproductions”.

2) “Actually, advertising is the least harmful form of propaganda—precisely because it is so conspicuously in the service of its source, the sponsor. It is effective on behalf of the advertised product precisely because the sponsor exists to assure the customer of the reliability and credibility of his or her promise, because the sponsor is visibly, eagerly and reliably there to stand behind the product, to give customers the assurance they need to buy in the first place”.

Please critically evaluate separately in the booklet provided at least two different sides or viewpoints of each of the two issues above. Please print neatly in the booklet provided. You will have exactly 20 minutes. This paper should contain an appropriate level of sophistication and critical thought. Your responses will be graded by an independent source,

It is important to note here that the prompts for the beginning of the semester remain exactly the same for both the Autumn Semester 2011, and the Spring Semester 2012. For the end of the semester prompts, there was considerable discussion as to how to design the prompts. If
the prompts were changed in any way, the research could be subject to the potential bias that one set of prompts were more interesting or more motivating than the other set, thereby affecting the essay scores and the statistical result. If the essay-prompts were left to be identical, one could argue that would affect the result because the students might remember contemplating the alternative perspectives of that question earlier in the semester. It was ultimately decided to give the students the identical prompts at the end of the semester, but in reverse order.

**Background for Pilot Study Two**

After the encouraging results for Pilot Study One, my doctoral thesis advisor suggested that expanding the study to include another institution with a different experiential component would make the research richer and more relevant and applicable to a broader range of academia. Since Wagner was involved in the Teagle study with Belmont University, that was a first consideration. However, after assessing several other institutions, Monmouth University came to the fore. Monmouth University is geographically convenient, located in Long Branch, New Jersey, and an hour automobile drive from Wagner College. The student demographics are similar, and the two institutions compete with each other to recruit students and are in the same athletic division, Northeast Conference, Division One.

Professionally, Monmouth University has a renowned entrepreneurial program. In 2010, the entrepreneurship course taught by Professor Buzza, and subsequently used in the research for this dissertation, received the “Most Innovative Entrepreneur Course Award” in the Country by the United States Association for Small Business and Entrepreneurship (USASBE).

Therefore, before the Spring Semester 2011 began, we conducted a series of meetings and interviews to help design the pilot for the Monmouth Study Two. Professor Buzza agreed to conduct the research in the same way that had been selected for the Wagner Pilot Study One, and
we decided it would be wise to perform a pilot study designed around the way the Monmouth University Entrepreneurial classes are conducted. Therefore we collaborated on a pilot for Monmouth Study Two which would be conducted by the author of this dissertation in the Spring Semester 2011 in the Strategic Marketing class (course designation MK 420). This collaboration has resulted in the publication of two articles (Appendices C, D), and a joint presentation at a conference in Las Vegas that won the best presentation award for the session.

**Design for Pilot Study Two**

Monmouth University (MU) has a Center for Entrepreneurship, a division of the business school. The Director of the Center is Professor Buzza, a collaborator in this research. The function of this center is to provide an entrepreneurial experience through two main classes per semester where the students create and develop new entrepreneurial ideas and create start-up companies as part of the course syllabus (Appendix AA). Once the company is created by the students within the constraints of the Monmouth University instructor and in accordance with the syllabi, the university has the option to sell the rights to the start-up company or its product. In one case, the students had the option to purchase that company for $1 and continue its operation. The university’s website states that to date, these classes have successfully launched several businesses, such as Second Chances, MUCE Capital, Shore Sense, Better Baking Company and Pasta Sauce, and Nanina’s in the Park, just to name a few (“Entrepreneurship classes at Monmouth University,” n.d.). The Pilot Study Two incorporated the lessons learned from Pilot Study One, and adapted the research to the Monmouth University program. According to the syllabus, all students that register for the class must participate in the entrepreneurial experiential project. Therefore, one main difference in the research is that there is no experimental group and control group for comparison purposes as in Wagner Study One. Hence, the essay-prompt scores
from the start-of-semester for all students were compared to the essay-prompt scores for all students at the end-of-semester. Therefore, the statistical comparison was adapted as such. Another difference is that the students in the Entrepreneurial classes were from all business concentrations (i.e. accounting, finance, management and marketing). Accordingly, and in agreement with Professor Buzza, the critical thinking skills of the students were similarly measured with a new set of essay-prompts created by the same author to account for the different audience (Appendix R), as shown below

By conducting Monmouth Study Two in this way, we would also achieve a rich comparison of similar research with two different experiential experiences embedded into two different institutions.

**Appendix R**

Research Prompts Mk 420 Spring Semester 2011

Spring 2011 Research prompts

Semester-start Prompt

February 23, 2011

Mk 420 – Strategic Marketing

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!
1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.) economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.

In other words, we tried to simulate Pilot Study One, but adapted to the differences in the two programs, incorporating the improvements learned from Pilot Study One. The prompts were be administered the same way as Pilot Study One, using two Wagner graduate assistants with the same scorer training and scorer procedures as used in Pilot Study One. The GA’s also used the same NSF SOLO taxonomy. Since there was no control group because all students participated, the research was designed to measure, compare and analyse the change in the average pre- and post-test scores for all students as distinct from a comparison of the scores between the participating and non-participating students as was done in Pilot Study One.

Since the syllabi for the Monmouth University entrepreneurial experiential classes were established for years before this research was performed, Pilot Study Two had to focus only on the assessment of critical thinking ability of the participating students. Because the Pilot Study Two for this research was performed at Wagner College, the pilot class syllabus of Spring 2011 (Appendix S) was designed to imitate the Monmouth University class style, so that the resulting Monmouth Study Two would provide objective results and provide meaningful comparisons regarding the efficacy of the two different experiential components. Additionally, Wagner students would receive the benefits of being introduced to an award winning pedagogical style.

The Pilot Study two marketing class was designed to provide an overview of Strategic Marketing. Lectures and text material will include evaluating markets, segments and customer value for strategic planning purposes. The Course will also cover designing, developing and
implementing market driven strategies including the use of case studies and real world application, which includes an experiential component. As part of the teaching philosophy, the syllabus states that students learn through a combination of traditional means such as textbook reading and class lectures, but they learn in a deeper way when they practice applying the knowledge gained to a particular experiential project. It is currently planned that we will be doing a marketing and strategic exercise with the Staten Island Zoo. This is an opportunity for the student to learn how to apply the marketing and strategic theory, and hopefully improve critical thinking skills and the application of creativity through the process.

In order to imitate the Monmouth classes, the author of this dissertation conducted a series of meetings and interviews with the Director of the Monmouth Entrepreneurial program to understand the characteristics of those classes. A few important differences were found between the two types of classes: (1) there was only one entrepreneurial product chosen by the Monmouth University Class in each semester (2) all students at Monmouth University participated in the launch of the new product during the semester (3) the students worked in different functional groups (such as accounting, management, legal and marketing groups) to launch the selected new products. Therefore, the Pilot Study Two was adapted as follows: (1) As with the Monmouth classes there was only one company involved in the study (2) all of the students had to participate in the experiential program and (3) two groups were created with functional requirements within the marketing field such as promotion, advertising and research. Since there was no control group, the essay-prompt was changed to measure the difference between critical thinking skills of the students at the beginning and the end of the semester. This also required the creation of a different set of prompts. The table below illustrates the important differences between Pilot Study One and Pilot Study Two.
Table 5

Important Differences between Pilot Study One and Pilot Study Two

<table>
<thead>
<tr>
<th>Pilot Study One</th>
<th>Pilot Study Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>The students were given a choice between two experiential clients</td>
<td>As with the Monmouth classes where there was only one entrepreneurial start up, there was only one company involved in the study.</td>
</tr>
<tr>
<td>The students were given a choice to participate in the experiential exercise (experimental group), or not to participate (control group)</td>
<td>All of the students had to participate in the experiential program</td>
</tr>
<tr>
<td>The students registered to the class were primarily marketing students, the “scope of work” was primarily marketing oriented</td>
<td>Since in the Monmouth classes, the students were from all business concentrations and divided into functional groups, two groups were created with functional requirements within the marketing field such as promotion, advertising, and research.</td>
</tr>
</tbody>
</table>

Table 6

Profile of Pilot Study Two

<table>
<thead>
<tr>
<th>Semester of study</th>
<th>Total # of students</th>
<th>Total # of clients</th>
<th># of experiential students</th>
<th># of control students</th>
<th>Instructor</th>
<th>Grader</th>
<th>Grading tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2011</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>DeSimone</td>
<td>2GAs</td>
<td>NSF SOLO</td>
</tr>
</tbody>
</table>

This Pilot Study Two was designed with Wagner College students in the Strategic Marketing class (course designation MK 420) in Spring Semester 2011, but adapted with the Monmouth University courses and students in mind. Otherwise, the study was conducted similarly to the Pilot Study One including all improvements and modifications learned from that study.
There were six students in this advanced marketing class who were divided into two teams of three and had to negotiate different business deliverables within the same company. As in Pilot Study One, the college instructor (the author of this dissertation) played the role of the Account Manager.

It was assumed that the students’ critical thinking essay prompt scores would improve during this one semester as compared to their own beginning scores. The beginning and ending essay-prompts are included as Appendix T and Appendix U for the Pilot Study Two, and reprinted here for ease of reference.

Appendix T

MK 420 Prompts Spring Semester 2011, February 2011

February 23, 2011

MK 420 – Strategic Marketing

Please respond to the following questions (prompts). Please answer neatly in the booklets provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study for my Doctoral research.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!
1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.) Economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.

Appendix U

Mk 420 Prompts Spring Semester 2011, May 2011

May 09, 2011

MK 420 – Strategic Marketing

Please respond to the following questions (prompts). Please answer neatly in the booklets provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study for my Doctoral research.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth.

Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!

1) How important do you think the clarity of your “sense of self” is to your ability to formulate and execute effective strategic marketing decisions?
2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) Please discuss the impact of more general macro issues on the specifics of your strategic marketing plan and/or specific marketing promotional proposals. These general marketing issues might include upper management objectives, level of Bureaucracy of the organization, pace of the organization, level and type of employees, and overall budget constraints.

Table 7

*The Average Class Scores of Pilot Study Two*

<table>
<thead>
<tr>
<th>Total Class</th>
<th>Beg. Average</th>
<th>Ending Average</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt one/Prompt three</td>
<td>4.83</td>
<td>5.00</td>
<td>3.45%</td>
</tr>
<tr>
<td>Prompt two/Prompt two</td>
<td>4.08</td>
<td>4.25</td>
<td>4.08%</td>
</tr>
<tr>
<td>Prompt three/Prompt one</td>
<td>3.17</td>
<td>4.08</td>
<td>28.95%</td>
</tr>
<tr>
<td>Total class average</td>
<td>4.03</td>
<td>4.44</td>
<td>10.34%</td>
</tr>
</tbody>
</table>

As it relates to the scoring process and the bias in the critical thinking scores in Pilot Study Two was to seek to assess the model to determine whether it is generally applicable. The information listed below is a comparison of a series of two-by-two experimental designs: Since all students participated in the study, we evaluated how often each of the six students individually improved their score from the beginning of the semester when compared to the end of the semester scores for each of the three essay-prompts.
Table 8

*Individual Student Scores – Pilot Study Two*

<table>
<thead>
<tr>
<th>Individual student scores</th>
<th>Higher</th>
<th>Same</th>
<th>Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt One/Prompt three</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Prompt two/Prompt two</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Prompt three/Prompt One</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total individual scores</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the three prompt comparisons of the six student scores, in 10 of 18 possibilities (56%) the students scored higher at the end of the semester than in the beginning of the semester; in 6 of 18 possibilities (33%), the students scored the same at the end of the semester than in the beginning, and in 2 of 18 possibilities (11%), the students scored lower at the end of the semester than at the beginning of the semester.

**The Research Design for Monmouth Study Two**

Table 9

*The Research Design for Monmouth Study Two*

<table>
<thead>
<tr>
<th>Semester of study</th>
<th>Total # of students</th>
<th># of clients</th>
<th># of experiential students</th>
<th># of control students</th>
<th>Instructor</th>
<th>Grader</th>
<th>Grading tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2011</td>
<td>67</td>
<td>1</td>
<td>67</td>
<td>0</td>
<td>Buzza</td>
<td>2GAs</td>
<td>NSF SOLO</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>55</td>
<td>1</td>
<td>55</td>
<td>0</td>
<td>Buzza</td>
<td>2GAs’s</td>
<td>NSF SOLO</td>
</tr>
</tbody>
</table>

Monmouth Study Two was conducted at Monmouth University in the “Entrepreneurial Studies” courses by instructor Buzza (Professor of Business, Director of the Center for
Entrepreneurial Studies). All students participated in the study with only one “entrepreneurial start-up company.”

For example, in Autumn Semester 2011, the selected entrepreneurial start-up was a GPS system designed to find lost pets. The students examined the current GPA technology for alternative commercial usage. Since many pets are lost or stolen each year, the students developed a device that would fit around the collar of domestic animals, and would allow pet owners to track the pets through GPS technology.

In order to accomplish this new product launch, the students were divided into business functional teams (i.e. marketing, financial, accounting, management), and had to negotiate different schedules and time commitments to perform the actual formation of the “start-up-company” with fixed deadlines attainable within one semester. The instructor played the role of the CEO. At both the beginning and the end of the semester the students used exactly the same three prompts, which were used in the Pilot Study Two. These prompts are copied below and are included as Appendices V and W.

**Appendix V**

Prompts for Monmouth University Autumn Semester 2011, September 2011

Tuesday, September 20, 2011

Monmouth University Entrepreneurship Program

Professor John Buzza

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.
Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic. You will have approximately 20 minutes to respond to all three questions. Thank you for your participation!

1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.) Economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.

Appendix W
Prompts for Monmouth University Autumn Semester 2011, December 2011

Monmouth University Entrepreneurship Program
Professor John Buzza, Wednesday December 7, 2011

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.
Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions:

1. How important do you think the clarity of your “sense of self” is to your ability to formulate and execute effective strategic marketing decisions?

2. How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3. Please discuss the impact of more general macro issues on the specifics of your strategic marketing plan and/or specific marketing promotional proposals. These general marketing issues might include upper management objectives, level of Bureaucracy of the organization, pace of the organization, level and type of employees, and overall budget constraints.

Thank you for your participation!

The assumption was that the process of forming the “entrepreneurial start-up companies” as the experiential component of the business class by itself would improve the students’ critical thinking skills.

Since there was no grade associated with the performance of the essay-prompts by design, the students actually had to change their perspective about doing school work or taking tests. Many students at the undergraduate level are good test takers, and they strive to obtain good grades by reading or determining what the instructor is looking for and providing that requirement. It is not particularly popular to do extra work unless there is extra credit, or to challenge the validity of an assignment unless there is a personal benefit to do so. By using the
essay-prompts as an anonymous and ungraded assignment, it is also challenging the students’ willingness to invest their time in a critical thinking exercise even though they do not receive any traditional benefit.

Therefore, the design for Pilot Study Two was an effort to assess the improvement of the students’ critical thinking skills by going through the entrepreneurial exercise as explained above. This would be supported if the average mean-scores of the essay-prompts at the end of the semester would be higher as compared with the average mean-scores at beginning of the semester.

The essay-prompts used for the entire Monmouth Study Two are all included as Appendices V, W, X, and Y.

Materials Used

Course syllabi. Five different syllabi were used in the business courses. In this part, the author of this dissertation focuses only on the “study specific” components of the syllabi, while the actual documents are presented as (Appendices F, G, S, Z, AA)

Pilot study one. The original syllabus (Appendix Z) did not include an experiential component, because the client selection was finalized after the syllabus was completed. This is the reason this was the only semester with only a post-test essay prompt (Appendix L). The purpose of the research was explained verbally to the students, and each client representative gave an explanation of the marketing expectations of the study to the teams. The primary purpose of the study was to test the educational concept, to test the validity of the essay-prompts, to test the scoring design with the graduate assistant, and to establish the procedure for capturing and organizing the statistical data.
Wagner study one: Autumn Semester 2011- September through December 2011.

Syllabus for MK-301, Consumer Behavior (Wagner College). The course is designed to have both oral and written exams. Under the Final Written Exam section, the syllabus (Appendix F) requires an assignment (20% of the final grade), which will grade the students' ability to write, in detail, about three formerly selected topics of their interest chosen from the textbook, either as an integrated whole or as individual topics.

For example, a student may (1) update the topic through additional research (2) disagree/agree with the topic through creative expression or example (3) use his/her personal experience to provide a unique perspective on the topic or (4) visually build on the topic beyond what the textbook presented.

Under that same section in the syllabus, the students were offered an alternative to the above version of the final written exam with the same 20% grade value. This alternative final included the successful participation with a selected “client” and a summary presentation of their experience at the end of the semester.

Wagner Study One: Spring Semester 2012- January through May 2012.

Syllabus for MK-311, Advertising (Wagner College). In this semester, the syllabus was designed similar to Wagner Study One, Autumn Semester 2011. However, instead of being offered a choice between the experiential component and a traditional take-home exam, the design for the experimental group was identical to the autumn session, but the control group participated in classroom simulation of the experiential project with clients. In other words, instead of participating with a “real world” client, these students picked an existing company of interest to them. One control group team picked Music Television (MTV), and the other control group team picked Under Armour as their simulation company. This design change was made to
further isolate the affects of the impact on the students’ critical thinking skills on their “real world” experiential component.

Both participating and non-participating students were teamed in groups from two to eight; the team as a whole received a creative grade, worth 30%. The first half of the semester was devoted primarily to domain knowledge, while the second half of the semester was primarily devoted to the application of what they had learned. Each team was asked to prepare three pieces of creative advertising during the second half of the semester, after their creative concepts were approved by the instructor. The three forms of original work were:

1) a draft print advertisement
2) a draft TV or radio advertisement (sample radio ad in Appendix BB) and
3) a social networking concept.

The control group did not have actual clients but they had to prepare creative assignments for their chosen companies (MTV or Under Armour), while the experimental group prepared these three assignments for their own “real world” client. For both groups, the instructor played the role of a mock marketing and advertising account manager for each of the teams for their selected company.

**Pilot Study Two: Spring Semester 2011- January through May.** Since Pilot Study Two was designed to adapt the research methodology for the Monmouth University Study Two, the syllabus (Appendix S) was designed to simulate the entrepreneurial classes.

The course description was to provide an overview of strategic marketing including the evaluation of markets, market segments and providing customer value and customer service for strategic planning purposes. This would be accomplished through the use of the text and lecture, but also by designing, developing and implementing market driven strategies using case study
analysis and the application to a “real world” organization. The experiential exercise was summarized briefly as a planned marketing and strategic exercise that would be negotiated with the Staten Island Zoo. This is an opportunity for the students to learn how to apply the marketing and strategic theory, and improve their critical thinking and creativity in the process.

Therefore, to imitate the Monmouth course syllabus, all students were required to participate with only one client, and the students were broken into two more functional teams. In keeping with the larger importance of the experiential grade in the Monmouth University entrepreneurial classes, the experiential project including the final presentation and was worth 40% of the final grade.

**Monmouth Study Two: Autumn Semester 2011- September through December 2011.**

**Syllabus for Entrepreneurship (Monmouth University).** The course description focuses on the attempt to make the students acquainted with the actual tasks and activities of the entrepreneur, from the excitement of the original concept to the reality of researching venture feasibility, financing the venture and ultimately launching the venture. The course was designed to lay the foundation for the student to understand the entrepreneurial approach and perspective of managing a start-up business. The course will examine the various approaches to establishing an entrepreneurial venture, as well as to identify and explore those tasks that need to be efficiently performed to optimize the probability of the success of any entrepreneurial venture. As with all of the courses in Wagner Study One, the text, case study analysis, and project based examples would be used to provide the domain knowledge required before and concurrent with the entrepreneurial experiential project. Both a strong work ethic and the ability and willingness to devote time outside of the normal class hours are emphasized.
As per the sample syllabus, (Appendix AA) before the semester begins, the students are asked to bring two viable business ideas for a business start-up to the first class. After the instructor chooses viable and educational idea alternatives, the class votes on the business they want to start. The business is not conceptual, but a real live business using seed money from a University account designated for Entrepreneurship. The students are broken into functional departmental groups including Marketing and Advertising, Sales, Research and Development, Web Site Design, Production, Administration and Accounting. Department heads are appointed, which then become the nucleus of the Executive board of the class. This board meets once a week outside of class. Each functional department is given a set of responsibilities each week and must present a progress report to the Board. At the end of the semester, the class presents its launch idea to the entire University family including the Board of Trustees, the President, the Provost, faculty, administration and other students. The grading attributed to the Team Project and Presentation is 25%.

**Monmouth Study Two: Spring Semester 2012- January through May.**

**Syllabus for Entrepreneurship, (Monmouth University).** The syllabus remained the same as above for Monmouth Study Two Spring Semester 2012.

**NSF Solo Taxonomy as an instrument for assessing the level of critical thinking.**

The participating graduate assistants (GA’s), who were scoring the students’ essay-prompt responses used the so called “NSF SOLO Taxonomy” (Appendix K). Appendix K is labelled Scoring Grid for the Teagle Grid because of its use by Wagner College because of its previous use in the Teagle foundation study. The NSF SOLO Taxonomy has been developed during wide-ranging educational projects by The National Science Foundation (NSF). Wagner College was one of the several educational institutions participating in the NSF’s Critical and Civic Thinking
(CT2) study, so it was only natural for the author of this dissertation to use this instrument for evaluation. The following is a brief description of the evolvement and usefulness of the NSF SOLO Taxonomy. According to Spicer and Hanks (1995), while in the past, “at least” seven critical thinking tests and multiple rubrics have been frequently used in pedagogical research, few are readily applied to assess formative learning outcomes in a variety of educational settings. SOLO taxonomy, a “prompt method” (Biggs & Collis, 1982) was selected by many of the NSF grantees because; it is applicable to students at multiple levels (Boulton-Lewis & English, 1998); represents stages of increasing organization and integration of knowledge (Burnett, 1999); has good inter-rater reliability (Biggs & Collis, 1982; Chan, 2002; Hattie & Purdie, 1998) and is useful for both the students and instructors (Biggs & Collis, 1982; Hattie & Purdie, 1998). The essay-prompt can be made very specific to the subject matter. There is no cost or budgetary concerns. It is also easy to scale to other classes and other institutions, like was done in this study with Monmouth University. The Collegiate Learning Association (CLA) is an accredited assessment organization and the SOLO Taxonomy is the assessment tool of choice for CLA. Similarly, SOLO Taxonomy is used in the book entitled Academically Adrift, by Arum and Roska (2011), which was one of the inspirations for the author of this dissertation in designing and furthering this research.

In particular, Solo Taxonomy for Assessing Level of Critical Thinking includes seven levels of critical thinking skills as listed below:

1. No understanding demonstrated. Response does not address the question or restates the question.

2. Limited understanding of topic. Responses focus on one conceptual item in a complex case and are not accurate or partially accurate.
3. Limited understanding of the topic. Response focuses on one conceptual item in a complex case and is accurate.

4. Understanding of several discrete components. Response is a collection of multiple items that are not related within the context of the exercise.

5. Understanding of several components that are integrated conceptually. Response may not prioritize information or be appropriate to the scale of the question.

6. Understanding of several components that are integrated conceptually. Response prioritizes information and is appropriate to the scale of the question.

7. Understanding demonstrated at a level extending beyond what has been dealt with in the question prompt. Response generalizes to situations beyond the scope of the question.

**The different sets of “essay-prompts” as research instruments.** Five different critical thinking essay-prompts were created for this study. All prompts were prepared by the author of this dissertation closely following the NSF guidelines. Prompts one and two were used in Pilot Study One and Wagner Study One at Wagner College; prompts three, four and five were used for Pilot Study Two and Wagner College and at Monmouth Study Two at Monmouth University.

Since Wagner College had adopted essay-prompts to assess critical thinking and civic engagement for accreditation purposes, the author of this dissertation had been acquainted with this assessment system (including strengths and weaknesses) by his involvement in Wagner’s Experiential Program (officially referred to as the Wagner Plan). This involvement included participation in meetings that discussed the prompts, review of research results, and proctoring specific (CLA) exams for senior students using various sets of essay-prompts. When the author of this thesis developed essay-prompts for the studies he used feedback from college experts and
participating students and a review of the literature about prompts used from this perspective (Burnett, 1999; Chan, 2002; Hattie & Purdie, 1998; Spicer & Hanks, 1995). From the college experts and participating students, one of the main issues was to create an essay prompt that was motivational for the students. Once the essay-prompts were created, the prompts and the procedures were reviewed by a number of experts from Wagner College. Dr. Sterns had been the lead professor who had won the Teagle Grant. Katia Gonzalez was the head of the Center for Teaching Learning and Research. Dr. LoRe was the chair of the business department at Wagner and actively involved, and ultimately responsible for the assessment process for the business department at Wagner College, particularly as it related to the accreditation process that was going on at Wagner with both the Middle States college wide assessment and the business department accreditation in particular. On the basis of feedback from this group of experts it was generally found by that if the student was not receiving course credit to write the essay-prompts, the amount of effort exerted by the student to respond attentively to the essay-prompt was negligible. It was also the consensus of this group that if the students were rewarded with course credit on the basis of the score of their essay-prompt, this would mean the attention given to the essay-prompt could be affected more by the importance of their grade at that point in the semester, as opposed to a reflection of their critical thinking skills.

Having been a proctor for a number of CLA exams, the author of this dissertation was able to observe this motivation factor first hand. While proctoring exams prior to this research study, some students would leave after only a few minutes, others would clearly not be putting attention towards the essay-prompts and still others would appear to be working diligently until the time ran out. Therefore, when developing the prompts, and with the advice of the colleagues above, the author created prompts that were related to the critical thought of the class, interesting
to write about, and not subjects that would be specifically covered during the class. The author had received excellent feedback from marketing students in previous courses he had taught at Wagner College from an article written by Levitt named *The Poetry of Becoming* (1993) and decided to construct the essay-prompts for Pilot Study One with compelling marketing questions raised in that article. The assumption was that this would be a more motivating exercise for the student to participate in, than more obscure prompts. The amount of time given to the student to complete the two essays was based the author’s observation during his proctoring experience, and was set at 20 minutes. As explained above, these prompts were develop based on an extensive review of the literature on the topic an reviewed by Dr. Mary LoRe, the chair of the business department and by Dr. Katia Gonzalez, the chair of the Center for Teaching Learning and Research of Wagner College. The essay-prompts were first administered during the Pilot Study One in Autumn 2010 class, and additional feedback was received from the students that answered the prompts during the trial study.

For the development of the three essay-prompts for Pilot Study Two, the same procedure was followed in the development of the essay-prompts with the following differences:

1) Since the Monmouth students in the entrepreneurial classes had a broader range of business concentrations, and since the Pilot Study Two class was strategic marketing, the essay-prompts were geared toward business strategy as opposed to marketing issues. Therefore, instead of using the Theodore Levitt article as the source of the questions, the introduction section of the textbook for the Strategic Marketing course (course designation MK 420) was used as the source of inspiration for the essay-prompts.
2) Since the actual Monmouth Study Two research would be conducted by Professor Buzza at Monmouth University, the author did seek his input and opinion once the new prompts were drafted.

**Informed consents.** Participating students and instructors were asked to sign an informed consent form (below). Everybody involved in the study signed the form voluntarily. An example of the informed consent form used for studies at Wagner College is presented below:

**Informed Consent for College Assessment**

Wagner College’s Committee for Learning Assessment would like to use the responses on this assessment for evaluating institutional and general education goals. This study will enable the College to see which areas need to be taught in a more effective manner to enhance student learning. Your participation in this ongoing assessment will provide important information toward that end. Only results of students that have consented will be used for any dissemination in journals, professional meetings or other public venues. All information you provide will remain confidential: and results made public will not identify you. If you have any further questions to ask concerning this study, please feel free to ask for clarification before giving your consent.

I, ____________________________, have read the above statement and agree to let Wagner College include some of my responses on this exam as part of the College’s assessment activities aimed at enhancing student learning.

Signed: _______________________ Date: ____/ ____/ ______

**Methods**

**Definition, selection and recruitment of “clients” as business entity for students’ experience.** The initial concept of integrating “clients” (businesses that require and are interested in marketing support from undergraduate business student teams) into a marketing classroom exercise actually evolved from the request of the Associate Provost of Wagner College to the author of this dissertation to connect with the Staten Island Zoo to provide them
with marketing support through Wagner’s Marketing Student Club, a club to which the author was the Faculty Advisor. The Director of the Zoo specifically wanted to create an advertising campaign for the Zoo, with particular interest in activating and including a social media communication program through the use of Facebook. Other requests for the campaign included an effort to modernize and improve their website design and develop an email advertising campaign based on their available e-mail addresses. This request did not seem to suit the Marketing Club, the existing internship program or other student/community related programs at Wagner College. The marketing club has primarily been involved in marketing or creating events (i.e. Halloween party fund raisers) and since it is a student organization, the directors of the club decide what events or projects they want to be involved with. When the Staten Island Zoo project was presented to them, they were not enthusiastic about participating in the project. Since the project was challenging and marketing specific, it would be difficult to find interested, available and qualified internship candidates to accomplish the tasks, particularly if the interns would need direct supervision. They were asking for this help because they did not have the expertise in house to do it. Consequently, if the Zoo used interns alone, there was no process in place to obtain my input to help develop the campaign, which was specifically requested by the Director of the Zoo. As a consequence, since the author of this dissertation was already exploring the possibility to develop an experiential component for use in an advanced marketing class the idea to incorporate an experiential team exercise into the Pilot Consumer Behavior class was proposed to the Associate Provost and the Director of the Zoo. This approval gave the author an opportunity to develop and implement an experiential component into the syllabus of his next marketing class that will improve critical thinking skills of the participating students, a requirement that the author of this dissertation had always intended to develop. In the process of
pursuing the option of incorporating participation of the Staten Island Zoo into the Autumn 2010 Consumer Behavior class, two other suitable business opportunities surfaced. While the Autumn 2010 timing turned out not to be right for the Zoo because they had not filled the position of Vice President of Marketing, the other two clients were used to test this new experiential concept in Pilot Study One in Autumn Semester 2010 (The Zoo subsequently became the singular client for Pilot Study Two, in the spring of 2011).

The next step was to define the characteristics of a client. An ideal client is a company with a need for marketing services or deliverables that can be provided by undergraduate business students, with the instructor and the client representative jointly acting as consultants to the students. Eventually 15 “clients” emerged, all in close vicinity to Wagner College, so they could be incorporated into the courses of Wagner Studies. A more detailed client list can be found in Appendix E.

For Pilot Study One and Two and Wagner Study One, Companies were selected as potential clients in a number of ways: (1) Some potential clients were found through a close association with intern requests from the Career Development Office at Wagner College (2) Some potential clients were found through the association with the Staten Island Chamber of Commerce (3) Some potential clients were found through referrals from other departments or associates (such as the Central Library and Wagner’s alumni, for example) in Wagner College (4) Some potential clients were referred by the Wagner Marketing Club (5) Some potential clients were referred by other instructors (6) In one case, a student in one of the classes suggested her mom’s business as a client.

Negotiation of the “Scope of Work” with the clients. From the very first involvement of a “client” in the study, it became apparent that it was imperative to the success of the
experience that a clear and realistic work proposal (defined as “scope of work” SOW) be developed and agreed between the involved faculty member, the student(s) and the client. A sample SOW proposal is included in Appendix J.

It also became clear through the process of client selection that negotiating the scope of work would become an essential part of the experiential exercise. Negotiating a realistic collaboration, including the clarification of the client’s marketing objectives and expected final marketing deliverables, required the students to evaluate their own marketing skills and capabilities and to project the time required to complete the requested task(s). It also required some judgments from the participating student(s) regarding the effort they would have to apply in order to meet the realistic expectations of their client and obtain satisfactory grades for the class.

The author of this dissertation would act as the mediator between the students and the client in finalizing the SOW. The instructor’s supervision provided a more experienced perspective as it relates to client expectations and the assessment of the team’s collective mix of talents. This mediation would mostly be done in a meeting with the client, but sometimes was done by conference call or by email. In virtually all cases, it was the responsibility of the student team to write an outline of the scope of work and obtain agreement from the client and instructor.

**Grouping students for research with clients or for “start-up companies.”** For Wagner Study One, prior to the start of the semester, the instructor would have already communicated with a number of potential clients, and selected those that he believed to be the most appropriate from the perspective the course content. A sample client offering including student teams from the Wagner Consumer Behavior class from Autumn 2011 is found in Appendix I. Since it was found in Pilot Study One and Two that students were more motivated to
participate actively when they selected their client from a variety of opportunities, a number of clients from different industries were offered to the students as options during Wagner Study One. The students were then either given a presentation in class by the client(s) or the instructor summarized the business and preliminary client expectations based upon previous meetings with them. In most cases the student selections were honored, unless the teams were too large or too small. The largest team in Wagner Study One was eight students and the smallest team was two. Once the teams were selected, the process of developing the scope of work described above commenced.

For Monmouth Study Two at Monmouth University, students were asked to present their own individual entrepreneurial start-up idea to the instructor and other students in the class. Once all of the ideas were explained and discussed in class, the instructor and the students evaluated the various options, and together selected the start-up idea that would most likely fulfil the course objectives within the semester.

**Application of the essay-prompts in the classroom.** For Wagner Study One, once it was determined which students were in the experimental groups and which remained in the control groups, the students were given the beginning of the semester essay-prompts to complete. This was usually done in the next scheduled class after the teams were selected, so the students had an opportunity to confirm their choice. The essay-prompts with instructions and blank blue booklets were handed out to the students by the instructor in the first part of the class with a brief explanation of the purpose of the research. The students were given 20 minutes to respond. The essay-prompts and the blue booklets were collected and delivered to the graduate assistants. The GA’s performed scoring of the responses immediately after the class. The same procedure was repeated at the end of the semester.
For Monmouth Study Two at Monmouth University, the same procedure was followed once the class had determined which product or service they were going to develop and launch during the semester. The students were given the identical 20 minutes to answer the prompts, and the author of this thesis personally picked up the blue booklets from Professor Buzza and handed them to the same GA’s for scoring.

**Clients’ representative role in the classroom.** For Wagner Study One, while each client was handled individually, the following process was generally employed: When the client was chosen, the client representative would be introduced to the students, and it would be determined if a physical visit to their business was needed. Immediately thereafter, the negotiation of the scope of work would begin. Once the scope of work was agreed, a work-schedule was created, the form and timing of the progress reports was agreed and the communication protocol was established. Once this process was completed, the actual work of the experiential teams would begin. The teams were told to inform the instructor, other team members and the client representative of all relevant information and business proposals. Written meetings minutes were encouraged and team conference calls with the students, the client and the instructor were common. Near the end of the semester, a presentation date was subsequently scheduled in order for the team to explain, present and deliver their final report to the entire class in front of client representative.

The client representative for each team was requested and scheduled to attend the presentation and expected to provide feedback to the team which included an assessment of the quality and quantity of the work as compared to expectations, and to provide constructive feedback to the members of their team regarding each phase of the scope of work. Also, during the semester, there was a constant interaction between the client representative and the instructor.
at all meetings and in all forms of correspondence, including mail, telephone and email communication. The students were continuously provided feedback from the instructor about their performance in a number of ways. This was accomplished in short meetings before and after class, in scheduled briefings, and before and after conference calls with the client. The instructor would also comment on drafts of written correspondence as appropriate.

For Monmouth Study Two, once the entrepreneurial start-up was established, the teams were broken into functional groups. These groups communicated constantly with the instructor during class, and additionally by a computer email protocol established by the instructor.

At the end of the semester, a selected group of students presented their progress report at a semester end event, which included all participating and related vendors and sponsors, University administrators, other students, and faculty members of the business department.

**Actual scoring of the essay-prompts.** Each semester, the two selected graduate assistants in the Department of Business Administration at Wagner College were briefed about the purpose of the research study and trained about the use of the NSF-SOLO Taxonomy grading grid (Appendix K). This training was accomplished before the first essay-prompts were administered. On the day the essay-prompts were administered, completed essay-prompts and the students’ blue booklets were given to the two graduate assistants immediately after class. The first graduate assistant would number the booklets in random order, and create an Excel spreadsheet which included the booklet numbers, the graduate assistant’s name and the semester. The second graduate assistant would use the same booklet numbers and a similar spreadsheet without having seen the results of the first scorer. They recorded whether they were scoring the essay-prompts at the beginning of the semester or the end. They were instructed not to mark the booklets in any way while scoring. Once they had completed the scoring of an essay-prompt,
they were to record that score on their Excel spreadsheet. They were not to share their results with the other scoring graduate assistant. The two individual Excel spreadsheets with the original booklets were then delivered to the author of this dissertation. A third graduate assistant took the two Excel spreadsheets, and under the supervision of the author of this dissertation, created a combined spreadsheet which listed a column of the direct scores for each of the graduate assistants, and proceeded to double check the statistical work, and average the scores for prompt one for each of the graduate assistants and prompt two for each of the graduate assistants. When the essay prompt scores for both the beginning and the end of semester scores were recorded, these Excel spreadsheets would then become the raw data used for statistical analysis.

Collection of the feedback information from clients, instructors, students and related parties about the efficacy of this teaching method. To find feedback pertaining to the two teaching methods and how using experiential components in different ways influenced student learning of critical thinking, opinions of the participants were collected. The procedures and methods of the opinion collection used in each of the two studies are summarized below and described in detail in the pending article DeSimone and Buzza (2013a) (Appendix D). The narrative of opinions collected for the courses taught at Wagner College are followed by the narrative of opinions collected for the courses taught at Monmouth University.

Courses taught at Wagner College. At Wagner College, we had two designated courses: (1) Consumer Behavior (MK 301) and (2) Advertising (MK 311).

Opinion collection from the clients. As it relates to the participating businesses (Clients) in the experimental marketing courses taught at Wagner College, at the end of each semester the instructor sent an email to the client’s representative thanking him/her for their participation and asking for opinions and suggestions about the entire process of the course. In
addition, when possible, there was a final wrap-up meeting between the client representative and the instructor to discuss the experience in further detail. At the end of each semester, after the students made their final presentations to the client(s), any updates received from the client(s) (i.e., an advertisement, promotion, etc.) was recorded by the instructor and shared with the students. All correspondence and documents related to each semester’s endeavor were collected and filed.

**Opinion collection from the instructors.** The authors of this paper communicated with the other faculty members across the college regularly on an informal basis, and conducted two formal interviews during and following the courses. During the semesters the authors maintained a file (diary) where they kept all their notes and/or comments together with comments from colleagues’, and other participating parties. All documents were filed per semester for further referencing.

**Opinion collection from the students.** Feedback from the students was received through their comments pertaining to the semester-end presentations, and/or on independent mid-semester diagnostic reviews, performed by a “neutral” instructor from outside of the business department. Additional student comments were received from the-end-of-semester student/teacher evaluation forms and informal student/instructor conversations throughout the semester. All documents were filed per semester for further referencing. Some additional, unsolicited correspondence was also received from related parties and filed.

Informed consent forms were collected from all participants and parties involved allowing the authors to use the information as part of a publication without mentioning names.

**Courses taught at Monmouth University (MU).** At MU, there were two designated courses: (1) Entrepreneurship (BM 451) and (2) Small Business Management (BM 434).
Opinion collection from the business partners and vendors. As it relates to the participating businesses and vendors in the entrepreneurial courses taught at Monmouth University, at the end of each semester the students presented their developed business plan to all involved parties in a formal presentation. In addition, when possible, there were ongoing discussions between the instructor and the involved partners to discuss the prospects of the new start-up business in further detail. Since the start-up venture was normally refined during the following Small Business Management classes, any updates and/or refinements was recorded by the instructor and shared with the students. All correspondence and documents related to each semester’s endeavor were collected and filed.

Opinion collection from the instructors. The authors of this paper communicated with the other faculty members across the University regularly on both a formal basis, through fund requests, and on an informal ongoing basis to refine the overall offering for implementation. During the semesters the authors integrated those refinements into the business plan as appropriate. All documents were filed per semester for further referencing.

Opinion collection from the students. Feedback from the students was received through their comments pertaining to the semester-end presentations, Additional student comments were received from the-end-of-semester student/teacher evaluation forms and informal student/instructor conversations throughout the semester. There were also meaningful discussions about the class content and the role of the students when the instructor helped students establish their entrepreneurial experience on their resumes. All documents were filed per semester for further referencing. Some additional, subsequent unsolicited correspondence was also received from students well after the semester was completed. This correspondence was also saved and recorded.
Statistical analyses. Each prompt was scored using a seven-point Lickert scale based on NSF SOLO Taxonomy. For the initial analyses of data, the student’s scores for each prompt given by the two graduate assistants were averaged and the total average for all students for each prompt (average of the averages) was calculated. For the statistical analysis, Microsoft Excel was used with a two sample t-test assuming unequal variances using the total averages. The results of these analyses are presented in Tables 12 & 15 for Wagner Study One at Wagner College and in Table 19 for the Monmouth Study Two at Monmouth University.

Because the average of an average (as used in the first analysis) reduces the variance of the variable, an alternative statistical analysis was also performed. In this analysis the sums of the scores given by two different scorers were used. This combination of analyses is useful since it provides two different statistical treatments of the same set of numbers.

Using Stata MP 12 the average differences between the pre and post-test total scores were then used as the dependant variable in a two-sample t-test assuming unequal variances.

The sample sizes across these two sets of estimates were slightly different due to the default listwise deletion method used by Stata. These results are presented in Tables 11 & 13AB&C for the Wagner Study One and Tables 18 & 20AB&C in the Monmouth Study Two.

To give an idea of how the data was distributed, the author of this dissertation ran kernel density graphs and visually examined the concordance graphs for the limits of agreement and the Bland Altman plots of differences in the scorers. To determine the inter-rater reliability, coefficient Kappa was estimated for each observational period (i.e. compare the pre scores of rater 1 and rater 2). These inter-rater-reliabilities showed a positive result for each semester of both Wagner Study One and Monmouth Study Two. These results are presented in Table 16 for Wagner Study One and in Table 22 for Monmouth Study Two.
Chapter 4: Results

Study One

Pilot Study One: Autumn Semester 2010 - September through December

For Pilot Study One of the Autumn Semester 2010, there was no pre-test essay-prompt given. Seven students agreed to participate in the experiential study, and 18 students optioned to remain in the control group and take the traditional final. The essay-prompt were administered late in the semester, with 18 students in attendance on the day of the research. The attendance was low because the essay-prompt was delivered to the students on the day following the Thanksgiving holiday. Regardless, the author of this dissertation learned significantly about the process that could be used in Pilot Study Two, Wagner Study One and Monmouth Study Two.

First of all, the 20 minutes for the test was clearly enough time. While some students did take the entire time to continue to write, the majority of the students were finished long before the 20 minutes had elapsed, despite the fact that the students were not allowed to leave the room until the entire 20 minutes had elapsed. From a statistical point of view, there was no significant difference between the average score of the participating students versus the non-participating students. The author wanted to be sure that the participating students, by their decision to choose to participate, would not have a significantly different score than the students who chose not to participate (control groups). As the research shows, as per Table 10 the participating students scored an average of 3.84 while the non participating students scored an average of 4.23. This indicates the students that did not participate had an average score of approximately 10% higher than those that did participate. This study was also designed to study the efficacy of the prompts. Again, with the participating students, they scored slightly higher on the second prompt (4.0) than on the first prompt (3.67), while the control group scored higher on the first prompt (4.55) as opposed to the second prompt (3.91). When asked after the study, the Graduate Assistants
grading the essay-prompts did not report a significant difference in the length or dedication to the answers. Since this was the Pilot Study to the research, the students answering the essay-prompts were also asked if the prompts were clear, and interesting. These initial statistical findings combined with the feedback from the GA’s and students led to the expansion from two prompts to three prompts in Pilot Study Two. It was also determined that the three questions at the beginning of Appendix L, which asked about the students expectation regarding Critical thinking and Creativity for the class did not provide sufficient value and therefore were kept in future tests only for Wagner Study One. However, even in Wagner Study One the scores for question one, two and three were not collected and analyzed after Pilot Study One, and were removed completely for the essay-prompts for Pilot Study Two.

Table 10

*Summary of Analysis of Pilot Study One*
| Autum 2011 |
|------------------|------------------|------------------|------------------|------------------|------------------|
| Participating (Experimental) Students | N | Mean score | N | Mean score | % | One Tail |
| | Beginning | Beginning | Ending | Ending | Change | t-test |
| Prompt 1 | N/A | 7 | 3.67 | N/A | N/A |
| Prompt 2 | N/A | 7 | 4 | N/A | N/A |
| Average combined | N/A | 3.84 | N/A | N/A |
| Non-Participating (Control) Students | N | Mean score | N | Mean score | % | One Tail |
| | Beginning | Beginning | Ending | Ending | Change | t-test |
| Prompt 1 | N/A | 11 | 4.55 | N/A | N/A |
| Prompt 2 | N/A | 3.68 | 11 | 3.91 | N/A | N/A |
| Average combined | N/A | 3.34 | 4.23 | N/A | N/A |
| All students in the class combined | N | Mean score | N | Mean score | % | One Tail |
| | Beginning | Beginning | Ending | Ending | Change | t-test |
| Prompt 1 | N/A | 18 | 4.24 | N/A | N/A |
| Prompt 2 | N/A | 18 | 3.94 | N/A | N/A |
| Average combined | N/A | 4.09 | N/A | N/A |

Wagner Study One
Two sets of data were collected in Wagner Study One. The first was in the Autumn Semester of 2011 in the Consumer Behavior class (course designation MK 301) and the second was in the Spring Semester 2012. As it is seen in Table 11, in Autumn 2011, the experimental group has shown a pre-test combined mean score of 7.43, and a post-test combined mean score of 8.34, indicating an average mean score improvement of 12%. However, the control group has shown a pre-test combined mean score of 6.66, and a post-test combined mean score of 6.93, indicating an average improvement of 4%.

In the Spring Semester 2012, the experimental group has shown a pre-test combined mean score of 9.31, and a post-test combined mean score of 8.94, indicating an average mean score reduction of 4%. In the Spring Semester 2012, the control group has shown a pre-test mean score of 9.44 and a post-test combined mean score of 9.14, indicating an average mean score reduction of 3.2%.
Data Summary: Pre and Post-Test Scores Descriptive Statistics by Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Semester</th>
<th>Period</th>
<th>Mean</th>
<th>S.E.</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Autumn 2011</td>
<td>Pre</td>
<td>7.43</td>
<td>0.48</td>
<td>1.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>8.34</td>
<td>0.48</td>
<td>1.91</td>
</tr>
<tr>
<td></td>
<td>Spring 2012</td>
<td>Pre</td>
<td>9.31</td>
<td>0.31</td>
<td>1.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>8.94</td>
<td>0.36</td>
<td>1.46</td>
</tr>
<tr>
<td>Control</td>
<td>Autumn 2011</td>
<td>Pre</td>
<td>6.66</td>
<td>0.81</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>6.93</td>
<td>0.58</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td>Spring 2012</td>
<td>Pre</td>
<td>9.44</td>
<td>0.39</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>9.14</td>
<td>0.46</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Table 12 is an analysis of summary data of the two essay-prompt scores of Wagner Study One. In this analysis, the test scores of the two graduate assistants were combined and then averaged. In the Autumn Semester 2011, the experimental group has shown a pre-test combined mean score of 3.68, and a post-test combined mean score of 4.07, indicating an average mean score improvement of 10.69%. In the Autumn Semester 2011, the control group has shown a pre-test combined mean score of 3.34, and a post-test combined mean score of 3.48, indicating an average improvement of 4.31%. The combined classes’ pre-test mean score was 3.52 and a post-test combined mean score of 3.86, indicating a combined class average improvement of 9.8%.

In the Spring Semester 2012, the experimental group has shown a pre-test combined mean score of 4.64, and a post test combined mean score of 4.89, indicating an average mean score improvement of 5.18%. In Spring 2012, the control group has shown a pre-test combined mean score of 4.70, and a post test combined mean score of 4.69, indicating an average reduction
of 0.12%. The combined classes’ pre-test mean score was 4.65 and a post-test combined mean score of 4.52, indicating a combined class average reduction of 2.76%.

Table 12

Comparative Analysis of Pre and Post Test Scores by Category of Students (Two-Sample Test Calculation Assuming Unequal Variances Used in Excel)

<table>
<thead>
<tr>
<th>Student</th>
<th>N</th>
<th>Mean Score</th>
<th>N</th>
<th>Mean Score</th>
<th>% Change</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning</td>
<td></td>
<td></td>
<td>Ending</td>
<td>Dec 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autumn 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>16.5</td>
<td>3.68</td>
<td>16.5</td>
<td>4.07</td>
<td>10.69</td>
<td>0.1354</td>
</tr>
<tr>
<td>Control</td>
<td>13.5</td>
<td>3.34</td>
<td>15.0</td>
<td>3.48</td>
<td>4.31</td>
<td>0.3772</td>
</tr>
<tr>
<td>Combined</td>
<td>30.0</td>
<td>3.52</td>
<td>31.5</td>
<td>3.86</td>
<td>9.80</td>
<td>0.1047</td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning</td>
<td></td>
<td></td>
<td>Ending</td>
<td>April 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring 2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>18.5</td>
<td>4.64</td>
<td>17.0</td>
<td>4.89</td>
<td>5.18</td>
<td>0.1495</td>
</tr>
<tr>
<td>Control</td>
<td>10.0</td>
<td>4.70</td>
<td>8.5</td>
<td>4.69</td>
<td>-0.12</td>
<td>0.4918</td>
</tr>
<tr>
<td>Combined</td>
<td>28.5</td>
<td>4.65</td>
<td>25.5</td>
<td>4.52</td>
<td>-2.76</td>
<td>0.2041</td>
</tr>
</tbody>
</table>

For the Autumn Semester 2011 pre-test results (Table 13A), the experimental group had a combined mean score of 7.43 with a standard deviation of 1.87 as compared to the control group which had a pre-test combined average score of 6.67 with a standard deviation of 2.8 or a variance of .77 (improvement of 12%) with a standard error of 0.95. When applying the t-test
formula, the difference from the mean population is 0.38, and calculating t-test using 1.87 standard deviations and 18 degrees of freedom, the t-test ratio of -0.81. Therefore we can conclude there is no significant statistical difference in the pre-test scores for the Autumn Semester 2011.

Table 13A

Comparative Analysis of the Significant Differences of the Pre-Test Scores for Experimental and Control Groups Using Strata Data 12 Mp Analysis. Wagner Study One – Autumn Semester 2011

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>12</td>
<td>6.6667</td>
<td>0.8126</td>
<td>2.8150</td>
<td>4.8781</td>
</tr>
<tr>
<td>Experimental</td>
<td>15</td>
<td>7.4333</td>
<td>0.4827</td>
<td>1.8696</td>
<td>6.3980</td>
</tr>
<tr>
<td>Combined</td>
<td>27</td>
<td>7.0926</td>
<td>0.4466</td>
<td>2.3206</td>
<td>6.1746</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-0.7667</td>
<td>0.9451</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference Mean</th>
<th>Control vs. Mean Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(T&lt;t)</td>
<td>0.2138</td>
</tr>
<tr>
<td>Pr(T&gt;t)</td>
<td>0.4277</td>
</tr>
<tr>
<td>Pr(T&gt;t)</td>
<td>0.7862</td>
</tr>
</tbody>
</table>

Table 13B shows the Spring Semester 2012 pre-test results; the experimental group had a combined mean score of 9.31 with a standard deviation of 1.33 as compared to the control group which had a pre-test combined average score of 9.44 with a standard deviation of 1.16 or a variance of .14 (reduction of 1%) with a standard error of 0.50. When applying the t-test formula the difference from the mean population is 0.07, and calculating t test using 1.33 standard
deviations and 18 degrees of freedom, the t test ratio is -0.28, and so we can therefore conclude there is no significant statistical difference in the pre-test scores for the Spring Semester 2012.

Table 13B

Comparative Analysis of the Significant Differences of the Pre-Test Scores for Experimental and Control Groups Using Strata Data 12 Mp Analysis. Wagner study One: Spring Semester 2012

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>9</td>
<td>9.4444</td>
<td>0.3859</td>
<td>1.1577</td>
<td>8.5546 - 10.3343</td>
</tr>
<tr>
<td>Experimental</td>
<td>18</td>
<td>9.3056</td>
<td>0.3135</td>
<td>1.3300</td>
<td>8.6442 - 9.9669</td>
</tr>
<tr>
<td>Combined</td>
<td>27</td>
<td>9.3518</td>
<td>0.2414</td>
<td>1.2543</td>
<td>8.8556 - 9.8481</td>
</tr>
</tbody>
</table>

Difference
Mean Control vs. Mean Experimental

\[ t = -0.2794 \]

Satterthwaite's degree of freedom

Ha diff<0  Ha diff=0  Ha diff>0
Pr(T<t) =0.6084  Pr(T=t) =0.7831  Pr(T>t) =0.3916

For the total combined two semesters (Autumn 2011 and Spring 2012) pre-test results (Table 13C) shows that the experimental group had a combined mean score of 8.46 with a standard deviation of 1.83 as compared to the control group which had a pre-test combined average score of 7.86 with a standard deviation of 2.62 or a variance of 0.60 (improvement of 1%) with a standard error of 0.66. When applying the t-test formula, the difference from the mean population is 0.30, and calculating t-test using 1.83 standard deviations and 28 degrees of
freedom, the t ratio is -0.9115. Therefore we can conclude there is no significant statistical
difference in the pre-test scores for the entire Wagner Study One.

Table 13C

*Comparative Analysis of the Significant Differences of the Pre-Test Scores for Experimental and Control Groups Using Strata Data 12 Mp Analysis. Wagner Study One: The Two Semesters Combined*

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>21</td>
<td>7.8571</td>
<td>0.5723</td>
<td>2.6227</td>
<td>6.6633</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.0510</td>
</tr>
<tr>
<td>Experimental</td>
<td>33</td>
<td>8.4545</td>
<td>0.3193</td>
<td>1.8244</td>
<td>7.8041</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.1050</td>
</tr>
<tr>
<td>Combined</td>
<td>54</td>
<td>8.2222</td>
<td>0.2955</td>
<td>2.1711</td>
<td>7.6296</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>8.8149</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.5974</td>
<td>0.6554</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control vs. Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satterthwaite's degree of freedom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27.5333</td>
</tr>
<tr>
<td>Ha diff&lt;0</td>
<td>Pr(T&lt;t)</td>
<td>0.1844</td>
<td></td>
<td></td>
<td>Ha diff&gt;0</td>
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<tr>
<td></td>
<td>Pr(T&gt;t)</td>
<td>0.3687</td>
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<td></td>
<td>Pr(T&gt;t)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>=0.8156</td>
</tr>
</tbody>
</table>

Table 14A shows post-test results for the Autumn Semester 2011; the experimental group
had a mean score of 8.34 with a standard deviation of 1.91 as compared to the control group
which had a post-test combined average score of 6.93 with a standard deviation of 2.26. This
represents a difference of the mean scores of 1.41 (an improvement of 20%) with a standard
error of 0.75. When applying the t-test formula the difference from the mean population is 0.70,
and calculating t test using 1.91 standard deviations and 28 degrees of freedom, the t test ratio is
-1.8702. Therefore we can reject the null hypothesis with confidence of approximately 96.4% and conclude there is a significant difference in post-test scores for the Autumn Semester 2011.

Table 14A

*Comparative Analysis of the Significant Differences of the Post-Test Scores for Experimental and Control groups using Stata Data12 MP Analysis. Wagner Study One: Autumn Semester 2011*

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>15</td>
<td>6.9333</td>
<td>0.5832</td>
<td>2.2588</td>
<td>5.6824</td>
</tr>
<tr>
<td>Experimental</td>
<td>16</td>
<td>8.3438</td>
<td>0.4781</td>
<td>1.9124</td>
<td>7.3247</td>
</tr>
<tr>
<td>Combined</td>
<td>31</td>
<td>7.6613</td>
<td>0.3903</td>
<td>2.1733</td>
<td>6.8641</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-1.4104</td>
<td>0.7541</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Difference Mean Control vs. Mean Experimental

<table>
<thead>
<tr>
<th>Satterthwaite's degree of freedom</th>
<th>27.533</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Ha diff&lt;0</th>
<th>Ha diff=0</th>
<th>Ha diff&gt;0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(T&lt;t)</td>
<td>Pr(T&gt;t)</td>
<td>Pr(T&gt;t)</td>
</tr>
<tr>
<td>=0.0361</td>
<td>=0.0721</td>
<td>=0.9639</td>
</tr>
</tbody>
</table>

The post-test results for Spring Semester 2012 (Table 14B) shows the experimental group had a combined mean score of 8.94 with a standard deviation of 1.46 as compared to the control group which had a post-test combined average score of 9.14 with a standard deviation of 1.21 or a variance of .205 (non-improvement of 2%) with a standard error of 0.75. When applying the t test formula the difference from the mean population is 0.10, and calculating t test using 1.46 standard deviations and 14 degrees of freedom, the t test ratio is 0.35, and so using a one-tailed t
test, we cannot reject the null hypothesis. Therefore, there was no significant statistical
difference in the pre-test scores and the post-test scores for the Spring Semester 2012.

Table 14B

Comparative Analysis of the Significant Differences in the Post-Test Scores for Experimental
and Control groups using Stata Data 12 MP analysis. Wagner Study One: Spring Semester 2012

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>7</td>
<td>9.1429</td>
<td>0.4592</td>
<td>1.2150</td>
<td>8.0192 10.2665</td>
</tr>
<tr>
<td>Experimental</td>
<td>16</td>
<td>8.9375</td>
<td>0.3648</td>
<td>1.4592</td>
<td>8.1600 9.7150</td>
</tr>
<tr>
<td>Combined</td>
<td>23</td>
<td>9</td>
<td>0.2847</td>
<td>1.3652</td>
<td>8.4097 9.5903</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>0.2054</td>
<td>0.7541</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control vs. Mean Experimental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satterthwaite's degree of freedom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.7684</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ha diff&lt;0</th>
<th>Ha diff=0</th>
<th>Ha diff&gt;0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(T&lt;t)</td>
<td>Pr(T&gt;t)</td>
<td>Pr(T&gt;t)</td>
</tr>
<tr>
<td>=0.6342</td>
<td>=0.7315</td>
<td>=0.3658</td>
</tr>
</tbody>
</table>

The total combined two semesters post-test results (Table 14C) presented that the
experimental group had a combined mean score of 8.64 with a standard deviation of 1.70 as
compared to the control group which had a post-test combined average score of 7.64 with a
standard deviation of 2.22 or a variance of 1.00 (improvement of 13%) with a standard error of
0.56. When applying the t-test formula, the difference from the mean population is 0.50, and
calculating t-test using 1.70 standard deviations and 37 degrees of freedom, the t ratio is -1.79.
Therefore, using a one-tailed t test, we failed to reject the null hypothesis with confidence of
approximately 95.9% for the entire Wagner Study One. In other words, the experimental group
did show a significant statistical difference in the post-test scores when compared to the control group for the entire Wagner Study One.

Table 14C

*Comparative Analysis of the Significant Differences of the Post-Test Scores for Experimental and Control Groups Using Stata 12 MP Analysis. Wagner Study One: Two Semesters Combined*

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>22</td>
<td>7.6364</td>
<td>0.4735</td>
<td>2.2210</td>
<td>6.6516 8.6211</td>
</tr>
<tr>
<td>Experimental</td>
<td>32</td>
<td>8.6406</td>
<td>0.3006</td>
<td>1.7003</td>
<td>8.0276 9.2536</td>
</tr>
<tr>
<td>Combined</td>
<td>54</td>
<td>8.2315</td>
<td>0.2685</td>
<td>1.9732</td>
<td>7.6929 8.7701</td>
</tr>
<tr>
<td>Difference</td>
<td>-1.0043</td>
<td>0.5609</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Satterthwaite's degree of freedom**

<table>
<thead>
<tr>
<th></th>
<th>Ha diff&lt;0</th>
<th>Ha diff=0</th>
<th>Ha diff&gt;0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(T&lt;t)</td>
<td>=0.0407</td>
<td>Pr(T&gt;t)</td>
<td>=0.0816</td>
</tr>
</tbody>
</table>

Table 15 is designed to show the differences in the two essay-prompt scores of the experimental v. control students at the beginning of the semester and at the end of the semester.

In the Autumn Semester 2011, the participating group scores for essay-prompt version one were 18.09% better at the end of the semester than the control essay-prompt-scores. The participating group scores for essay-prompt version two were 12.61% better at the end of the semester than the control essay-prompt scores. The participating group total average of the two versions of the essay-prompt scores at the end of the semester was 16.94% better than the control group average.
of both essay-prompt scores. A one tail t-test did show a significant statistical difference within a 95% confidence level for Autumn 2011.

In the Spring 2012, the participating group scores for essay-prompt version #1 were 5.9% better at the end of the semester than the control essay-prompt scores. The participating group scores for essay-prompt version #2 were 2.63% better at the end of the semester than the control essay-prompt scores. The participating group total average of both essay-prompt scores at the end of the semester was 5.4% better than the control group average of both essay-prompt scores. A one tail t-test does not show a significant statistical difference within a 95% confidence level for the Spring Semester 2012.
Table 15
Comparative Analysis of Pre and Post Test Scores for Experimental Groups versus Control Groups Using Excel Program to Ascertain Comparative T-Test Results Using Two Test Calculation Assuming Unequal Variances

<table>
<thead>
<tr>
<th>Autumn 2011</th>
<th>N</th>
<th>Mean score</th>
<th>N</th>
<th>Mean score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
<td>Beginning</td>
<td>Ending</td>
<td>Ending</td>
<td>Comparative t - test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-Sep-11</td>
<td>20-Sep-11</td>
<td>8-Dec-11</td>
<td>8-Dec-11</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td>Participating Prompt 1</td>
<td>18</td>
<td>3.89</td>
<td>16</td>
<td>4.09</td>
<td>18.09</td>
<td>0.0502</td>
</tr>
<tr>
<td>Control Prompt 1</td>
<td>14</td>
<td>3.75</td>
<td>15</td>
<td>3.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating Prompt 2</td>
<td>15</td>
<td>3.47</td>
<td>17</td>
<td>3.94</td>
<td>12.61</td>
<td>0.1667</td>
</tr>
<tr>
<td>Control Prompt 2</td>
<td>13</td>
<td>2.88</td>
<td>15</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating Average</td>
<td>18</td>
<td>3.68</td>
<td>17</td>
<td>4.07</td>
<td>16.94</td>
<td>0.0543</td>
</tr>
<tr>
<td>Control Average</td>
<td>14</td>
<td>3.34</td>
<td>15</td>
<td>3.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2012</th>
<th>N</th>
<th>Mean score</th>
<th>N</th>
<th>Mean score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning</td>
<td>Beginning</td>
<td>Ending</td>
<td>Ending</td>
<td>Comparative t - test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-Feb-12</td>
<td>2-Feb-12</td>
<td>26-Apr-12</td>
<td>26-Apr-12</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td>Participating Prompt 1</td>
<td>19</td>
<td>4.63</td>
<td>18</td>
<td>5</td>
<td>105.93%</td>
<td>N/A</td>
</tr>
<tr>
<td>Control Prompt 1</td>
<td>10</td>
<td>4.5</td>
<td>9</td>
<td>4.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating Prompt 2</td>
<td>18</td>
<td>4.67</td>
<td>16</td>
<td>4.68</td>
<td>102.63%</td>
<td>N/A</td>
</tr>
<tr>
<td>Control Prompt 2</td>
<td>10</td>
<td>4.9</td>
<td>8</td>
<td>4.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating Average</td>
<td>19</td>
<td>4.64</td>
<td>18</td>
<td>4.89</td>
<td>105.39%</td>
<td>N/A</td>
</tr>
<tr>
<td>Control Average</td>
<td>10</td>
<td>4.7</td>
<td>9</td>
<td>4.69</td>
<td></td>
<td>0.2416</td>
</tr>
</tbody>
</table>
As explained previously in Methods section, the author of this dissertation employed numerous managerial methods to maintain accurate and objective scoring by the graduate assistants in each semester. The results in Table 16 below show the “limits of agreement” of each scorer for pre-test scores, post-test scores and combined scores. These inter-rater-reliabilities showed a positive result for both the Autumn Semester 2011 and the Spring Semester 2012. The pre-scorer essay scores of essay-prompt version #1 for graduate assistant “A” were compared with the pre-scorer essay-prompt scores for graduate assistant “B”. In every case, the actual score agreement exceeded what would have been expected if the scores were random. The Kappa coefficient can be used as a way to quantify test rater independence and as a way to quantify level of agreement. The above chart measures the actual test score agreements against the Kappa calculation called the proportion of chance or the (expected agreement), which would be interpreted as the proportion of times raters would agree by chance alone. In each comparison of scorer “A” with scorer “B” for each semester of Wagner Study One, the % of test score agreement exceeded the “expected” or chance agreement. The coefficient Kappa is an estimation of agreement between the two scorers.
Table 16

*Inter-Rater Reliability- Wagner Study One*

<table>
<thead>
<tr>
<th></th>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre rater a prompt 1 compared with Pre rater b prompt 1</td>
<td>31.15%</td>
<td>19.05%</td>
<td>0.1494</td>
<td>0.0595</td>
<td>2.51</td>
<td>0.0060</td>
</tr>
<tr>
<td>Pre rater a prompt 2 compared with Pre rater b prompt 2</td>
<td>41.82%</td>
<td>18.05%</td>
<td>0.2900</td>
<td>0.0610</td>
<td>4.75</td>
<td>0.0000</td>
</tr>
<tr>
<td>Post rater a prompt 1 compared with post rater b prompt 1</td>
<td>64.29%</td>
<td>25.32%</td>
<td>0.5218</td>
<td>0.0728</td>
<td>7.17</td>
<td>0.0000</td>
</tr>
<tr>
<td>Post rater a prompt 2 compared with post rater b prompt 2</td>
<td>71.93%</td>
<td>26.44%</td>
<td>0.6184</td>
<td>0.0732</td>
<td>8.44</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The summary of both semesters together also showed a high rate of reliability

<table>
<thead>
<tr>
<th></th>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>The sum of the pre scores for both semesters for both rater a and b</td>
<td>18.52%</td>
<td>11.52%</td>
<td>0.0791</td>
<td>0.0471</td>
<td>1.68</td>
<td>0.0466</td>
</tr>
<tr>
<td>The sum of the post scores for both semesters for both rater a and b</td>
<td>42.59%</td>
<td>15.50%</td>
<td>0.3206</td>
<td>0.0562</td>
<td>5.70</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
Study Two

Pilot Study Two: Spring Semester 2011 - January through May

The Pilot Study Two of Spring Semester 2011 was the first time within the research that a pre-test and post-test essay-prompt was administered. There were a total of six (6) students in this Strategic Marketing class (course designation MK 420). Since this was to be the pilot study for the Monmouth Study Two, a number of planning meetings were conducted to ascertain the characteristics of the entrepreneurial courses that would be used in Monmouth Study Two, and to adapt the research accordingly. In order to imitate the characteristics of those courses as much as possible, all six students agreed to participate in the experiential study, only one experiential client was used, and the class was broken into two groups with different functional assignments. As previously shown in the Material and Methods section, the essay-prompts were adapted to be more general than those of Wagner Study One. The first essay-prompt was administered when all students were present. As with Wagner Study One, the students were given exactly 20 minutes to complete their essays. The 20 minutes elapsed time for the test was clearly enough time, despite that now there were 3 essay-prompts to answer. From a statistical point of view as can be seen in Table 17 below, the students scored an average score of 4.03 in the first research test. This was not particularly different than the ending scores of Wagner Study One. However, what did become obvious in Pilot Study Two was that the students did seem to score better on the earlier prompts. In this test, the students scored an average of 4.83 on Prompt one, 4.08 on prompt two and 3.17 on prompt three. Contrary to the feedback on the Pilot Study One, both the GA’s and the students reported a slight level of fatigue as the test continued, even thought the elapsed test time was the same 20 minutes. This pilot study was also designed to assess the efficacy of the new essay-prompts. Following the test, the Graduate Assistants scoring the
essay-prompts and the students writing the essays both reported a noticeable difference in the length and dedication to the answers for the two later prompts. This was one of the factors in the research design decision to invert the prompts for the end-of-semester test, making prompt one on the pre-test become prompt three on the post-test, and Prompt three on the pre-test become prompt one on the post-test. Prompt two remained the same in each test.

For the comparison of scores, as per Table 17, the beginning scores for Prompt one in the first essay-prompt position, when compared to the same prompt in the last essay-prompt position, the post-test scores were 3.45% higher. The beginning scores for Prompt two in the second essay position, when compared to the same prompt in the same essay position, the post-test scores were 4.25% higher. The beginning scores for Prompt 3 in the third essay-prompt position when compared to the same essay-prompt in the first essay position, the post test scores were 28.95% higher. The average of all scores for all three essay-prompts at the beginning of the semester was 4.03, while the average of all scores for all three essay-prompts at the end of the semester was 4.44, indicating a 10.34% improvement in the average scores within one semester with approximately 75 days elapsed during the semester between tests. The one-tailed t test indicated a confidence within 87.11%. This was a sufficient result to move forward to the Wagner Study One and Monmouth Study Two in the Autumn Semester 2011 and Spring Semester 2012
Table 17

Summary of the Analysis of Pilot Study Two

<table>
<thead>
<tr>
<th>Spring 2011</th>
<th>N</th>
<th>Mean score</th>
<th>N</th>
<th>Mean score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning</td>
<td>Beginning</td>
<td>Ending</td>
<td>Ending</td>
<td>Change</td>
<td>t - test</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>23-Feb-11</td>
<td>24-Feb-11</td>
<td>9-May-11</td>
<td>10-May-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt 1/P3</td>
<td>6</td>
<td>4.83</td>
<td>6</td>
<td>5</td>
<td>3.45</td>
<td>0.3795</td>
</tr>
<tr>
<td>Prompt 2/P2</td>
<td>6</td>
<td>4.08</td>
<td>6</td>
<td>4.25</td>
<td>4.08</td>
<td>0.3206</td>
</tr>
<tr>
<td>Prompt 3/P1</td>
<td>6</td>
<td>3.17</td>
<td>6</td>
<td>4.08</td>
<td>28.95</td>
<td>0.0737</td>
</tr>
<tr>
<td>Average combined</td>
<td>6</td>
<td>4.03</td>
<td>6</td>
<td>4.44</td>
<td>10.34</td>
<td>0.1289</td>
</tr>
</tbody>
</table>

Monmouth Study Two

Monmouth Study Two comprised two sets of data, Autumn Semester 2011 and Spring Semester 2012. As it is seen in Table 18, in the Autumn Semester 2011, the experimental group has shown a pre-test combined mean score of the three essay-prompts of 7.90, and a post-test combined mean score of 8.33, indicating an average mean score improvement of 5% during the course of the semester.

In the Spring Semester 2012, the experimental group has shown a pre-test combined mean score of the three essay-prompts of 9.08, and a post-test combined mean score of 6.43, indicating an average mean score reduction of 29% during that semester.
Table 18

*Data Summary: Pre and Post Test Scores Descriptive Statistics by Group – Monmouth Study Two*

<table>
<thead>
<tr>
<th>Group</th>
<th>Semester</th>
<th>Period</th>
<th>Mean</th>
<th>S.E.</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Autumn 2011</td>
<td>Pre</td>
<td>7.90</td>
<td>0.26</td>
<td>2.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>8.33</td>
<td>0.51</td>
<td>2.94</td>
</tr>
<tr>
<td></td>
<td>Spring 2012</td>
<td>Pre</td>
<td>9.08</td>
<td>0.42</td>
<td>3.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>6.48</td>
<td>0.57</td>
<td>2.61</td>
</tr>
</tbody>
</table>

Table 19 is an analysis of summary data of the three essay-prompt research design of Monmouth Study Two. The test scores for each of the three prompts of each graduate assistant were combined and then averaged. In the Autumn Semester 2011, the experimental group (remember all students were participating) has shown a pre-test combined mean score of 2.74, and a post test combined mean score of 2.94, indicating an average mean score improvement of 7.39% during the semester.

In the Spring Semester 2012, the experimental group has shown a pre-test combined mean score of 3.17, and a post-test combined mean score of 2.18, indicating an average mean score reduction of 31.24%.
Table 19

Comparative Analysis of Pre and Post Test Scores (Two-Sample Test Calculation Assuming Unequal Variances Used in Excel) Monmouth Study Two: Autumn Semester 2011 and Spring Semester 2012

<table>
<thead>
<tr>
<th>Student</th>
<th>N</th>
<th>Mean Score</th>
<th>N</th>
<th>Mean Score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autumn 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>67</td>
<td>2.74</td>
<td>44</td>
<td>2.94</td>
<td>7.39</td>
<td>0.1555</td>
</tr>
<tr>
<td>Control</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student</th>
<th>N</th>
<th>Mean Score</th>
<th>N</th>
<th>Mean Score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring 2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>55</td>
<td>3.17</td>
<td>26</td>
<td>2.18</td>
<td>-31.24</td>
<td>N/A</td>
</tr>
<tr>
<td>Control</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

For the Autumn Semester 2011 pre-test results (Table 20A), the experimental group had a mean score of 7.90 with a standard error of 0.26 and a standard deviation of 2.11 as compared to the post-test combined average score of 8.33 with a standard error of 0.51 and a standard deviation of 2.94. The combined pre and post test scores indicated an average mean of 8.045 with a standard error of 0.24 and a standard deviation of 2.41. When applying the t-test formula the difference from the mean population is 0.43, and calculating the one tailed t test using 2.41 standard deviations and 49 degrees of freedom, the t test ratio is -0.7510. Based on the Pr (T<t) = 0.2281 for a one tailed t test, the students’ scores did improve between the pre-test and post-test.
scores, but the improvement was not statistically significant for Monmouth Study Two for the scores of the Autumn Semester 2011.

Table 20A

*Comparative Analysis of the Significant Differences of the Pre-and Post Test Scores for Experimental Groups Using Strata Data 12 Mp Analysis, Monmouth Study Two: Autumn Semester, 2011*

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Pre test</td>
<td>67</td>
<td>7.903</td>
<td>0.2572</td>
<td>2.1056</td>
<td>7.3894</td>
</tr>
<tr>
<td>Experimental Post test</td>
<td>33</td>
<td>8.3333</td>
<td>0.5120</td>
<td>2.9413</td>
<td>7.2904</td>
</tr>
<tr>
<td>Combined</td>
<td>100</td>
<td>8.045</td>
<td>0.2407</td>
<td>2.4070</td>
<td>7.5674</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.4303</td>
<td>0.5730</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference between pre and post scores</td>
<td>t</td>
<td>=-0.7510</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satterthwaite's degree of freedom</td>
<td></td>
<td>48.6899</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ha diff&lt;0</td>
<td>Pr(T&lt;t)</td>
<td>=0.2281</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ha diff=0</td>
<td>Pr(T&gt;0)</td>
<td>=0.4562</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ha diff&gt;0</td>
<td>Pr(T&gt;0)</td>
<td>=0.7719</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the Spring Semester 2012 pre-test results (Table 20B), the experimental group had a mean score of 9.09 with a standard error of 0.42 and a standard deviation of 3.19 as compared to the post-test combined average score of 6.48 with a standard error of 0.57 and a standard deviation of 2.61. The combined pre and post test scores indicated an average mean of 8.38 with a standard error of 0.37 and a standard deviation of 3.24. When applying the t-test formula the difference of the pre and post test scores is 2.61, and calculating the one tailed t test using 3.24 standard deviations and 43 degrees of freedom, the t test ratio is 3.6791. Based on the Pr (T<t) =
0.9997 for a one-tailed t test, the students’ critical thinking scores actually in the post test scores than they were in the pre-test scores.

Table 20B

Comparative Analysis of the Significant Differences of the Pre-and Post Test Scores for Experimental Groups Using Strata Data 12 Mp Analysis, Monmouth Study Two: Spring Semester 2012

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Pre test</td>
<td>57</td>
<td>9.0877</td>
<td>0.4222</td>
<td>3.1878</td>
<td>8.2419</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.9335</td>
</tr>
<tr>
<td>Experimental Pro test</td>
<td>21</td>
<td>6.4761</td>
<td>0.5706</td>
<td>2.6147</td>
<td>5.2860</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.6664</td>
</tr>
<tr>
<td>Combined</td>
<td>78</td>
<td>8.3846</td>
<td>0.3673</td>
<td>3.2443</td>
<td>7.6531</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.1161</td>
</tr>
<tr>
<td>Difference</td>
<td>27</td>
<td>2.6115</td>
<td>0.7098</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference between pre and post scores</td>
<td>t=3.6791</td>
<td>Ha diff&lt;0</td>
<td>Ha diff=0</td>
<td>Ha diff&gt;0</td>
<td></td>
</tr>
<tr>
<td>Satterthwaite's degree of freedom</td>
<td></td>
<td></td>
<td></td>
<td>43.2672</td>
<td></td>
</tr>
<tr>
<td>Pr(T&lt;t) =0.9997</td>
<td>Pr(T&gt;t) =0.0006</td>
<td>Pr(T&gt;t) =0.0003</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the Autumn Semester 2011 and the Spring Semester 2012 combined pre-test results (Table 20C), the experimental group had a mean score of 8.45 with a standard error of 0.24 and a standard deviation of 2.71 as compared to the Autumn Semester 2011 and the Spring Semester 2012 post-test combined average score of 7.61 with a standard error of 0.40 and a standard deviation of 2.94. The combined pre and post-test scores indicated an average mean of 8.19 with a standard error of 0.21 and a standard deviation of 2.80. When applying the t-test formula the difference of the pre and post test scores is 0.84, and calculating the one tailed t test using 2.80 standard deviations and 94 degrees of freedom, the t test results come to 1.7862. The post-
test scores were lower than the pre-test scores for Monmouth Study Two for the total scores of the Autumn Semester 2011 and the Spring Semester 2012 combined.

Table 20C

*Comparative Analysis of the Significant Differences of the Pre-and Post Test Scores for Experimental Groups Using Strata Data 12 Mp Analysis, Monmouth Study Two: The Two Semesters Combined*

<table>
<thead>
<tr>
<th>Group</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Std. Dev</th>
<th>95% Con Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Pre test</td>
<td>124</td>
<td>8.4476</td>
<td>0.2436</td>
<td>2.7124</td>
<td>7.9654 to 8.9297</td>
</tr>
<tr>
<td>Experimental Post test</td>
<td>54</td>
<td>7.6111</td>
<td>0.4000</td>
<td>2.9391</td>
<td>6.8089 to 8.4133</td>
</tr>
<tr>
<td>Combined</td>
<td>178</td>
<td>8.1938</td>
<td>0.2100</td>
<td>2.8014</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>0.8365</td>
<td>0.4683</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference between pre and post scores</th>
<th>t=1.7862</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satterthwaite's degree of freedom</td>
<td>94.031</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ha diff&lt;0</th>
<th>Ha diff=0</th>
<th>Ha diff&gt;0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(T&lt;t) =0.9614</td>
<td>Pr(T&gt;t) =0.0773</td>
<td>Pr(T&gt;t) =0.0386</td>
</tr>
</tbody>
</table>

Table 21 is designed to show the differences in each of the three essay-prompt scores of the experimental students at the beginning of the semester as compared to the end of the semester. This table shows the comparison by essay-prompt comparing the identical prompt in each case. For example, at the beginning of the semester what was prompt one was reversed to be prompt three at the end of the semester. Prompt two was the same prompt in the same position for both the pre and post-test. And what was prompt three in the beginning of the semester became prompt one in the end of the semester. In the Autumn Semester 2011, the group scores
for essay-prompt one were 17% better at the beginning of the semester than the same prompt as prompt three at the end of the semester. The group scores for essay-prompt two were 12.61% better at the end of the semester than the same prompt in the same position at the end of the semester. The group scores for essay-prompt one at the end of the semester was 23% better than essay-prompt three at the end of the semester. The group total average of all three essay-prompt scores at the end of the semester was 7.39% better than the group average of all three essay-prompt scores at the beginning of the semester. A one tail t-test shows a significant statistical difference within an 85% confidence level for the Autumn Semester 2011.

In the Spring Semester 2012, the group scores for essay-prompt one were 48% better at the beginning of the semester than the same prompt three at the end of the semester. The group scores for essay-prompt two were 26% better at the beginning of the semester than the same prompt in the same position at the end of the semester. The group scores for essay-prompt three at the beginning of the semester was 20% better than essay-prompt one at the end of the semester. The group total average of all three essay-prompt scores at the end of the semester was 31% worse than the group average of all three essay-prompt scores at the beginning of the semester.
Table 21

**Comparative Analysis of Pre and Post Test Scores for Experimental Groups Using Excel Program to Ascertain Comparative T-Test Results Using Two Test Calculation Assuming Unequal Variances Monmouth Study Two: Autumn Semester 2011 and Spring Semester 2012**

<table>
<thead>
<tr>
<th>Autumn 2011</th>
<th>N</th>
<th>Mean Score</th>
<th>N</th>
<th>Mean Score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Beginning</td>
<td></td>
<td>Ending</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-Sep-11</td>
<td>20-Sep-11</td>
<td>22-Nov-11</td>
<td>22-Nov-11</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td>Prompt 1/Prompt 3</td>
<td>67</td>
<td>2.9</td>
<td>33</td>
<td>2.39</td>
<td>-17.32</td>
<td>0.0203</td>
</tr>
<tr>
<td>Prompt 2/Prompt 2</td>
<td>66</td>
<td>2.72</td>
<td>44</td>
<td>3.16</td>
<td>16.16</td>
<td>0.0212</td>
</tr>
<tr>
<td>Prompt 3/Prompt 1</td>
<td>64</td>
<td>2.44</td>
<td>44</td>
<td>3.01</td>
<td>23.54</td>
<td>0.0111</td>
</tr>
<tr>
<td>Average Combined</td>
<td></td>
<td>2.74</td>
<td></td>
<td>2.94</td>
<td>7.39</td>
<td>0.1555</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring 2012</th>
<th>N</th>
<th>Mean Score</th>
<th>N</th>
<th>Mean Score</th>
<th>%</th>
<th>One Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Beginning</td>
<td></td>
<td>Ending</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-Feb-12</td>
<td>6-Feb-12</td>
<td>19-Apr-12</td>
<td>19-Apr-12</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td>Prompt 1/Prompt 3</td>
<td>54</td>
<td>3.56</td>
<td>21</td>
<td>1.83</td>
<td>-48.44</td>
<td>N/A</td>
</tr>
<tr>
<td>Prompt 2/Prompt 2</td>
<td>55</td>
<td>3.06</td>
<td>26</td>
<td>2.27</td>
<td>-25.93</td>
<td>N/A</td>
</tr>
<tr>
<td>Prompt 3/Prompt 1</td>
<td>54</td>
<td>2.92</td>
<td>26</td>
<td>2.35</td>
<td>-19.56</td>
<td>N/A</td>
</tr>
<tr>
<td>Average Combined</td>
<td>55</td>
<td>3.17</td>
<td>26</td>
<td>2.18</td>
<td>-31.24</td>
<td>N/A</td>
</tr>
</tbody>
</table>

To provide an idea of how the data was distributed, the author of this dissertation ran Kernel density graphs and visually examined the concordance graphs for the limits of agreement and the Bland Altman plots of differences in the raters. Table 22 show the “limits of agreement” of each scorer for the pre-test scores and post-test scores for each of the three prompts. These
interater-reliabilites showed a positive result for both the Autumn Semester 2011 and the Spring Semester 2012. The pre-rater essay scores of prompt one for graduate assistant-A were compared with the pre-rater essay-prompt scores for graduate assistant-B, and in every case, the actual score agreement exceeded what would have been expected if the scores were random. The Kappa coefficient can be used as a way to quantify test rater independence and as a way to quantify level of agreement. The chart below measures the actual test score agreements against the Kappa calculation called the proportion of chance or the (expected agreement), which would be interpreted as the proportion of times raters would agree by chance alone. In each comparison of scorer “A” with scorer “B” for each semester of Monmouth Study Two, the % of test score agreement exceeded the “expected” or chance agreement. The coefficient Kappa is an estimation of agreement between the two scorers.
Table 22

*Inter-Rater Reliability Monmouth Study Two*

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.41%</td>
<td>22.31%</td>
<td>0.3618</td>
<td>0.00406</td>
<td>7.79</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Post rater a prompt 1 compared with post rater b prompt 1

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>48.57%</td>
<td>20.73%</td>
<td>0.3512</td>
<td>0.0590</td>
<td>5.95</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Pre rater a prompt 2 compared with Pre rater b prompt 2

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.28%</td>
<td>24.02%</td>
<td>0.2930</td>
<td>0.485</td>
<td>6.04</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Post rater a prompt 2 compared with post rater b prompt 2

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.14%</td>
<td>22.45%</td>
<td>0.3184</td>
<td>0.0623</td>
<td>5.11</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Pre rater a prompt 3 compared with Pre rater b prompt 3

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>59.32%</td>
<td>25.14%</td>
<td>0.4566</td>
<td>0.0502</td>
<td>9.09</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Post rater a prompt 2 compared with post rater b prompt 2

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Std. Error</th>
<th>Z</th>
<th>Prob&gt; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.96%</td>
<td>26.89%</td>
<td>0.4934</td>
<td>0.0791</td>
<td>6.23</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
Chapter 5: Discussion

Discussion of Wagner Study One

Pilot Study One

The American position as the world’s number one economy is being challenged, and America’s future competitiveness and standard of living is in question. As part of the Institute for Strategy and Competitiveness, Michael Porter studies the U.S. competitive position in the world. Furman, Porter, and Stern focus primarily on Innovation and Innovative Capacity as the focus of their study (2002). Pilot Study One was originally designed to set out to improve the competitiveness of our undergraduate students by introducing new “real world” business challenges to our students.

The decline in the results and cost of our educational system is one of the causes of America’s reduction in competitiveness. “President Obama is committed to ensuring that America will regain its lost ground and have the highest proportion of students graduating from College by the year 2020” (“White House: Family,” 2009). Again, this Pilot was initiated to energize our students, and make the domain knowledge learned in the classroom more relevant to potential business employers, and therefore more relevant to our students.

The current population of students (Generation Y) has a different perspective regarding college education and work than previous American generations (Josiam et al., 2009). The author of this dissertation has conducted research using the evaluation forms (Appendix CC) in his senior capstone class which indicated that, according to the direct supervisor of the student, that the students scored the lowest in Creativity and Critical Thinking in the 17 categories as measured by the supervisors of their senior practicum.
While there is general agreement that critical thinking or practical thinking is a critical outcome for higher education, what is needed at this stage, according to the educational philosopher Ennis (1992) is a more analytical approach, involving studies from various disciplines (Moore, 2004). In a study which recorded the student’s supervisor evaluations over the last two years, the students averaged 3.64 in their evaluations (4 being the highest and 1 being the lowest), but their average scores for critical thinking and creativity were 3.50 and 3.36 respectively. The only score lower than creativity out of 17 separate measurement criteria was research at 3.22.

This cohort of business students needs to see the relevance of what they are learning in order to perform. They seek an opportunity as opposed to a job (MacArthur, 2009). While the cause of the low scores for creativity and critical thinking were not evaluated in this particular research, perhaps their lack of actual work experience makes it more difficult for the students to understand how to apply what they are learning. Whatever the cause, this is another form of evidence, in addition to considerable literature review of the skill gap, that the modern supervisors give current senior undergraduate students low scores for critical thinking in the workplace.

As previously stated in the literature review section, many professors and scholars believe that colleges and universities need to teach critical thinking skills to the current students, and that they are not doing so successfully (Case, 2005; Halpern, 1993; Reid, 2010).

Therefore, the author of this dissertation set out to develop a seminal marketing experiential component in Pilot Study One to embed into the undergraduate business program at Wagner College, and has designed research to measure if it is a statistically significant efficacious pedagogical method to teach critical thinking skills to the current generation of
students. In order to assess the broader scalability of the experiential component, the author expanded the same research methodology to measure the efficacy of the entrepreneurial studies program at Monmouth University by adding Monmouth Study Two.

**Wagner Study One: Autumn Semester 2011- September through December**

The compelling part of the Wagner College research derives from the comparison of those students that participated in the marketing experiential component, compared to those that did not. When comparing the scores of the end-of-semester prompts of those that did participate in the experiential component with those that did not, the findings become statistically significant according to a one-tailed t-test within 6%. Those that did not participate in the marketing incubator scored an average mean of 3.47 on prompt one at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored an average mean of 4.09 on prompt one. This represents an 18.09% better score and a one tailed significance within 5%. Those that did not participate in the marketing experiential component scored an average mean of 3.50 on prompt two at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored an average mean of 4.26 on prompt two. This represents a 21.17% better score despite an insignificant statistical result. Those that did not participate in the marketing experiential component scored a total average mean of 3.48 on both prompts at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored a total average mean of 4.07 on both prompts. This represents a 16.95% better total average score for those that participated in the marketing experiential component than those that did not with one-tailed t test significance within 6%.

While the Wagner Study One research consistently shows an impressive gain with all
students in critical thinking essay-prompt scores from the beginning of the semester to the end of the semester, the statistically significant scores are as a result of the scores at the end of the semester between those that participated in the marketing experiential component and those that did not. Since all other components of the course are identical this seems to indicate that the participation with the marketing experiential learning component leads to an improvement in critical thinking skills of the students over the course of one semester.

It should be noted again that the differences in observations in some of the research is attributable to the fact that some students either did not answer prompt two or did not answer sufficiently to merit a score. Whenever this happened, the research was designed such that the GA’s were told to mark the score with a N/A. If both GA’s scored a particular booklet N/A, then it was left N/A and not included in the averages. If one GA scored an N/A and another did not, a third GA was asked to review that booklet and make a determination whether the booklet should be scored or left as an N/A. Discussion with the GA’s and the students seem to indicate that some of the students became “less motivated” to write as time went on. It should also be noted that the students seemed to score better on the first prompt than the second prompt of the research. In the Autumn Semester 2011, 23 students scored better on the first prompt than the second prompt, 4 scored the same and only 5 students scored better on the second prompt than the first.

**Wagner Study One: Spring Semester 2012 – January through May**

The compelling part of the Wagner College research derives from the comparison of those students that participated in the marketing experiential component, compared to those that did not. When comparing the scores of the end-of-semester essay-prompts of those that did participate in the experiential component with those that did not, the findings were not
statistically significant according to the one-tailed t-test within a 95% confidence level. Those that did not participate in the marketing experiential component scored an average mean of 5.0 on prompt one at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored an average mean of 4.72 on prompt one. This represents a 5.93% better score by those that participated as compared to those that did not. Those that did not participate in the marketing experiential component scored an average mean of 4.68 on prompt two at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored an average mean of 4.68. This represents a 2.63% better score despite an insignificant one-tailed statistical result. Those that did not participate in the marketing experiential component scored a total average mean of 4.69 on both prompts at the end of the semester. Those that did participate in the marketing experiential component at the end of the semester scored a total average mean of 4.89 on both prompts. This represents a 5.39% better total average score for those that participated in the marketing experiential component than those that did not. While the scores were higher for the participating group in each case, the one-tailed t test did not show a significant statistical difference. In the Autumn Semester 2011, 23 students scored better on the first prompt than the second prompt, four scored the same and only five students scored better on the second prompt than on the first. The elapsed time between the pre-test on February 2, of 2012 and April 26, 2012 was 83 days.

The author of this dissertation has noticed a fairly important progressive increase in average scores for each semester. In the Autumn Semester 2011, the average scores for participating students were 4.07, while the average scores for the Spring Semester 2012 were 4.89. Similarly, the average scores for the Autumn Semester 2011 for non-participating (control group) students was 3.48, while the average scores for the non-participating students (control
group) was 4.69. A possible explanation might be that one of the GA scorers were different in the Autumn Semester 2011 than in the Spring Semester 2012, and therefore no assumptions can be made about the improvement in scores from one semester to the other.

**Discussion/Observations of the Statistical Results of Wagner Study One**

Statistically, in the Autumn Semester 2011, the experimental group’s average mean score improved from 3.68 when they answered the essay-prompts on September 20, to 4.07 when they answered the prompts on December 8. This indicates an improvement of 10.69% in the average scores in an elapsed time of 78 days. The control group’s average mean scores improved from 3.34 to 3.48 in the same time period, indicating an improvement of 4.31%. Considering that the only component in the class that was different was the experiential component, this was a significantly statistical improvement according to the one-tailed t-test calculation. These were very encouraging results that the embedded experiential component did have an impact on improving the critical thinking skills of the students in a relatively short period of time. The Arum & Roska Study (2011) was the most comprehensive critical thinking assessment I could find in the literature review of the subject. The Collegiate Learning Assessment test they administered to a large sample of 2300 students consisted of three open-ended components designed to assess the critical thinking skills of incoming college freshmen when compared to the scores of second semester sophomores. Their findings were that “an average scoring student in the Autumn of 2005 (this is when the test was administered) who enter higher education in the 50th percentile would reach the equivalent level of the 57th percentile by the end of their sophomore year. Therefore, three full semesters of college education had barely a noticeable impact on students’ skills on critical thinking, complex reasoning and writing (p. 35). Furthermore, they observe that at least 45% of the students showed no statistically significant
gains in critical thinking during the first three full semesters in college. While their study was a comprehensive examination of the theory that college education is “Academically Adrift,” and they statistically controlled for a number of factors such as race, previous educational preparation, SAT scores, etc. The 10.69% improvement in critical thinking scores in less than one semester for the experimental group and the statistical significance of the improved scores for the experimental group versus. the control group was an encouraging start to the research.

Statistically, in the Spring Semester 2012, the experimental group’s average mean score improved from 4.64 when they answered the essay-prompts on February 2, to 4.89 when they answered the essay-prompts on April 26. This indicates an improvement of 5.18% in the average scores in an elapsed time of 82 days. The control group’s average mean scores went from 4.70 to 4.69 in the same time period, indicating a reduction of 0.12%. In this semester, the experimental group did score an improvement as compared to the control group, but it was not statistically significant according to the one-tailed t-test calculation. The improvements in the mean scores for the experimental group was lower (5.18% in the Spring Semester 2012 as compared with the 10.69% in the Autumn Semester 2011) and the mean scores for the control group actually went from an improvement in Autumn Semester 2011 (4.31%) to a slight reduction (0.12%) in Spring Semester 2012. The difference in the percentage improvement between the experimental group and the control group is very similar (6.38% in Autumn Semester 2011 versus 5.30% in Spring Semester 2012). However, one immediate observation is that the mean scores were considerably better in the Spring Semester 2012 than in the Autumn Semester 2011. This is particularly interesting because one of the two GA scorers was the same in each semester, and the new GA received similar training as the other. The essay-prompts were exactly the same. To illustrate the difference, the combined means scores by semester were as follows:
There was one difference in the class syllabus which might explain the higher scores. It was implied that the responses to the essay-prompts would be graded. This might have inflated the beginning of the semester essay-prompt scores. A reason for the slightly smaller difference in the improvement of the experimental group versus the control group could be that the control group simulated parts of the experiential exercise with the advertising deliverables for a chosen company in the class. And one last observation was that the end of the semester scores in the Spring Semester 2012 were lower in the Wagner Study One, the Monmouth Study Two, and another test experimental class that was also given in the Spring Semester 2012 by a Wagner colleague. The conclusion of all three instructors was that many of the students were seniors graduating in a few weeks, and thereby, much less motivated to do well on the test.

However, the another interesting observation will be made when comparing the scores of Wagner Study One to Monmouth Study Two when using the same GA scorers, with the same scoring instructions in the exact same semesters. This will be discussed following the discussion of the results for Monmouth Study Two.

Discussion of Monmouth Study Two

Pilot Study Two

It was decided to apply the same exact research and to use similarly designed and adapted essay-prompts for the Pilot Study for Monmouth University. This design was an attempt to measure the improvement in students’ critical thinking scores in the entrepreneurial experiential component included in the program. Therefore, Pilot Study Two was conducted in the Strategic
Marketing class (course designation MK 420) at Wagner College in the Spring Semester 2011. In this Strategic Marketing class, all students participated in the marketing experiential component as is exactly the case in the Monmouth entrepreneurial studies experiential component. New and more relevant essay-prompts for the Monmouth class were developed by the author of this dissertation, in consultation with Professor Buzza, who would be the instructor in the Monmouth class and the administrator of the research for Monmouth Study Two. With the assistance of professor John Buzza (the instructor of the classes at Monmouth University), the essay-prompts were redesigned to be more relevant to the Monmouth University students that are taking courses in entrepreneurial studies, while maintaining the same style as the prompts that had been used for Pilot Study One.

Once the essay-prompts were adapted, the same exact pre-test and post-test prompts were used throughout Monmouth Study Two, with the same instructions, and with the same GA scorers. Only one client was used in Pilot Study Two, in order to simulate the Monmouth classes. This was done primarily for the sake of statistical comparability. While Wagner College and Monmouth University are geographically close, have a similar student profile, play sports in the same regional division, and numerically have a similar demographic mix of students, there is no research to specifically assess that critical thinking scores should be similar under similar circumstances, or that success in critical thinking scores in one school would be applicable to the other.
Monmouth Study Two: Autumn Semester 2011- September through December

The Monmouth Study Two research compares the essay-prompt scores of all the students at the beginning of the semester and again at the end of the semester. Since all of the students participate in the entrepreneurial experiential exercise during the semester, there is no separate experimental group and control group like there is in the Wagner Study One. This was also the first attempt to have the research developed by the author of this dissertation applied by another instructor. Except for the briefing on the research design, and the interview sessions to adapt the Pilot Study One to the Monmouth classes, Professor Buzza applied the research independently of the author.
Table 24

Monmouth Study Two: Autumn Semester 2011 Student Score Comparison by Prompt

<table>
<thead>
<tr>
<th>Prompt Comparison</th>
<th>Beginning</th>
<th>Ending</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt 1/Prompt 3</td>
<td>2.90</td>
<td>2.39</td>
<td>-17.32%</td>
</tr>
<tr>
<td>Prompt 2/Prompt 2</td>
<td>2.72</td>
<td>3.16</td>
<td>16.16%</td>
</tr>
<tr>
<td>Prompt 3/Prompt 1</td>
<td>2.44</td>
<td>3.01</td>
<td>23.54%</td>
</tr>
<tr>
<td>Total Average combined</td>
<td>2.74</td>
<td>2.94</td>
<td>7.39%</td>
</tr>
</tbody>
</table>

The students scored better on average by 7.39% for the end of the semester essay-prompt scores than they did on the beginning of the semester scores. This result came in a different institution, with different students, with no control group, administered by a different instructor using the same experimental research design, same scoring technique and same GA scorers. Certain similarities with the Autumn Semester of Wagner Study One include the trend in the order of scoring by prompt. For example, the beginning of the semester essay-prompt scores were 2.90 for prompt one, 2.72 for prompt two, and 2.44 for prompt three. On the end of the semester scores, with the prompts in reverse order, the scores were 3.01 for the first prompt, 3.16 in the second prompt, and 2.39 in the third prompt. The instructor’s observation while administering the test indicated that the 20 minute time period allotted to complete the prompts was sufficient. The differences included that in Wagner Study One there were only two prompts, and in Monmouth Study Two there were three prompts. While the 20 minutes of time allocated was sufficient, this appeared to affect the scores substantially. Below is a comparison of the Wagner Study One Autumn Semester 2011 average scores of all students with the Monmouth Study Two Autumn Semester 2011 average scores of all students:
<table>
<thead>
<tr>
<th></th>
<th>Beginning</th>
<th>Ending</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wagner Study One</td>
<td>3.52</td>
<td>3.86</td>
<td>9.8%</td>
</tr>
<tr>
<td>Monmouth Study Two</td>
<td>2.74</td>
<td>2.94</td>
<td>7.39%</td>
</tr>
</tbody>
</table>

This indicates a higher score for the average Wagner Study One scores that were 28% higher than Monmouth Study Two in the beginning of the semester average scores and Study One scores that were 31% higher than Study Two scores in the end of the semester. Since the research design, the scorers and the scoring method were exactly the same, these differences in scores may be attributable to the comparison of the number of prompts, and possibly the prompts themselves.

The research was not designed for institutional comparison purposes. It was designed to measure the impact of the two different experiential components in two different institutions administered by two different instructors. In this critical design aspect, the participating students improved their critical thinking scores by 10.69% in Study One and 7.39% in Study Two for the Autumn Semester 2011.

The difference in the average scores of the students are only important as a determinant to the decision of whether to incorporate two prompts or three prompts into future similar research. It should be noted again that the differences in research observations are attributable to the fact that some students either did not answer prompt two and/or prompt three or did not answer sufficiently to merit a score. Whenever this happened, the research was designed such that the GA’s were told to mark the score with a N/A. If both GA’s scored a particular booklet N/A, then it was left N/A and not included in the averages. If one GA scored an N/A and another did not, a third GA was asked to review that booklet and make a determination whether the booklet should be scored or left as an N/A. Discussion with the GA’s and the students seem to indicate that some of the students became “less motivated” to write as time went on.
Two of the critical thinking prompt comparisons indicated a statistically significant result (with one comparison showing a 24% improvement within a 2% significance variance), while the negative drop in one prompt score made the overall average result impressive with a 7.39% total improvement, but still not statistically insignificant within a 5% confidence level according to the one-tailed t test. The mean essay prompt scores of critical thinking improved from the beginning of the semester to the end of the semester at Monmouth University. Two of the three prompt scores showed a statistically significant improvement from the beginning of the semester to the end of the semester. One also needs to consider that while the author wanted the critical thinking prompts to be broad enough for all business students to be able to answer freely, the initial design was specifically for marketing students. Almost 80% of the total students in the Monmouth classes were not marketing students.

Monmouth University had a shorter elapsed time (56 days) in Study Two between the administration of the critical thinking essay-prompts at the beginning and the end of the semester, as opposed to the Wagner College elapsed time (78 days). Since the literature on the topic questions whether critical thinking can be taught at all (Willingham, 2007) it is quite challenging to assume it can be taught with measurement taking less than one full semester.

While the results were not statistically significant in Monmouth Study Two from Autumn Semester 2011, both instructors were convinced that the qualitative educational benefits for the students, the instructors, and Monmouth University as a whole were impressive (DeSimone & Bzza, 2013b) (Appendix C). In fact, the Entrepreneurial Program at Monmouth University has now become financial model for raising funds for the university, and is a public relations success story.
Monmouth Study Two: Spring Semester 2012- January through May

The Monmouth Study Two research for the Spring Semester 2012 again compares the essay-prompt scores of all the students at the beginning of the semester and again at the end of the semester. There were no changes made to the research design as compared to the Autumn Semester 2012.

Table 25

Monmouth Study Two: Spring Semester 2012, Student Score Comparison by Prompt

<table>
<thead>
<tr>
<th>Prompt 1/Prompt 3</th>
<th>Beginning</th>
<th>Ending</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.56</td>
<td>1.83</td>
<td>-48.44%</td>
</tr>
<tr>
<td>Prompt 2/Prompt 2</td>
<td>3.06</td>
<td>2.27</td>
<td>-25.93%</td>
</tr>
<tr>
<td>Prompt 3/Prompt 1</td>
<td>2.92</td>
<td>2.35</td>
<td>-19.56%</td>
</tr>
<tr>
<td>Total Average combined</td>
<td>3.17</td>
<td>2.18</td>
<td>-31.24%</td>
</tr>
</tbody>
</table>

After a very encouraging result in Autumn Semester 2011 for Monmouth Study Two, which found a nearly statistically significant improvement of 7.39% for the student critical thinking scores, the Spring Semester 2012 did not show any improvement in the scores at all. In fact, for every prompt comparison, the scores at the end of the semester were much lower.

There were some encouraging signs when the beginning of the semester essay-prompt scores were initially scored by the GA’s in that the average beginning prompt scores were higher in this semester than the previous semester. The average beginning prompt scores for Study Two in Autumn Semester 2011 were 2.74, and the average beginning prompt scores for Spring Semester 2012 were 3.17, or an improvement of 16%. This is consistent with Study One, where the average beginning of the semester prompt scores in Autumn Semester 2011 for all students was 3.52, and the average beginning prompt scores for Spring Semester 2012 was 4.65, an
improvement of 32%. This may be partially attributable to the fact that one of the two GA scorers was different. However, in Study One, the average ending prompt scores for all students for Autumn Semester 2011 were 3.86, and the average ending prompt scores for Spring Semester 2012 were 4.52, an improvement of 17%. On the other hand, in Study Two, the average ending prompt scores for all students for Autumn Semester 2011 were 2.94, and the average ending prompt scores for Spring Semester 2012 was 2.18, a reduction of 26%. This result seems to reinforce the theory that the students at the end of the spring semester, many of them graduating, were simply not motivated for such an essay-prompt test at that point in the semester.

The author of this dissertation has noticed a fairly important progressive increase in average scores for each semester. In the Autumn Semester 2011, the average score for participating students was 4.07, while the average score for the Spring Semester 2012 was 4.89. Similarly, the average score for the Autumn Semester 2011 for non-participating (control group) students was 3.48, while the average scores for the non-participating students (control group) was 4.69. One explanation might be that the GA scorers were different in the Autumn Semester 2011 than in the Spring Semester 2012, and therefore no assumptions can be made about the improvement in scores from one semester to the other.

The Monmouth Study Two was the only part of this research study out of the five semesters tested where the post-test average essay-prompt scores were lower than the pre-test essay-prompt scores. Overall average scores at the end of the semester were approximately 31% lower on the post-test scores as opposed to the pre-test scores. Since the GA scorers were the same, the prompts were the same, the syllabi and classes were the same, and the instructor was the same, the author of this dissertation attributes this difference primarily to the timing of the post-test as it relates to the spring semester and the preponderance of graduating students,
distracted by their graduating status. Since considerable literature debates the issue of whether critical thinking can be taught at all, let alone in one semester, it becomes essential that future research is designed so that students are motivated to apply themselves to the essay-prompts at the end of the spring semester.

**Discussion/Observations of the Statistical Results of Monmouth Study Two**

One observation by both the author of this dissertation and Professor John Buzza is that some students do not appear to like to be a part of a research study as part of their classroom exercise. Comments from students seem to indicate they are in class to be taught, and have no vested interest in improving the course structure for the benefit of future students. As one will observe particularly from in the ending scores of Spring Semester 2012, there was a considerable lack of motivation on the part of the students to take the 20 minutes to write their essay-prompts, even though the tests were given during scheduled class time and required no preparation. This observation was reinforced by Professor DeSimone’s experience when administering CLA prompts for Wagner College accreditation purposes during an unrelated senior reflective tutorial class (course designation BU 400) in Spring Semester 2012. This is despite the fact that the professor provided considerable explanation to the students about the importance of the test for future accreditation purposes. Further evidence arose when the CLA prompt was administered to senior students at Wagner College at the end of the Spring Semester 2012 when they were offered 10% extra credit based on the grading of the essay-prompt responses. In this case, the same Graduate Assistants that graded the research essay-prompts for the Spring Semester 2012 research studies for Wagner Study One and Monmouth Study Two recorded scores that were higher than the ending essay-prompt scores of the advertising class administered by Professor
DeSimone in the same semester, and the ending scores of the Monmouth entrepreneurial class in Spring Semester 2012.

This brings up the issue of assigning a grade to the essay-prompt as a way to obtain a more objective result. It is suggested that future research should assess the possibility of even higher post-test scores if the essay-prompt scores are considered as part of the final grade.

The structure of the marketing experiential component for Pilot Two was expanded to include diversified marketing functions, in order to simulate the entrepreneurial studies of Monmouth University, which includes all business disciplines in phases of a business start-up. In the entrepreneurial studies course, groups are separated by function, which includes legal, finance, accounting, management and marketing. This was also designed to capture the research experience of the other business experiential component programs studied in preparation for this dissertation such as like Belmont and Elon Universities, which are also testing a broader range of domain knowledge and expertise to their business clients in their programs.

For the Pilot Study Two of the Spring Semester 2011, this was the first time within this dissertation research that a pre-test and post test essay-prompt was administered. There were a total of six students in this Strategic Marketing class. In order to imitate the characteristics of those courses as much as possible, all six students agreed to participate in the experiential study, only one experiential group was used, and the class was broken into two groups with different assignments. The essay-prompt were adapted to be more general than those of Study One, as seen from a comparison of the prompts on Appendix L with the prompts on Appendix R. The first essay-prompt was administered on February 23, 2011 and all students were present. Again, they were given exactly 20 minutes to complete their essays. The 20 minutes elapsed time for the test was clearly sufficient time to complete the essays in depth, even though there were now
three essay-prompts instead of the two essay-prompts administered in Pilot Study One. While some students did take the entire time to continue to write their essays, the majority of the students were finished long before the 20 minutes had elapsed, despite the fact that the students were not allowed to leave until the entire 20 minutes had elapsed. From a statistical point of view, the students scored an average score of 4.03 in the first research test. This was not particularly different than the ending scores of Pilot Study One. However, what did become apparent in Pilot Study Two was that the students did seem to score better on the earlier prompts. In this test, the students scored an average of 4.83 on essay-prompt one, 4.08 on essay-prompts two and 3.17 on essay-prompt three. Contrary to the feedback on Pilot Study One, both the GA’s and the students reported a slight level of fatigue as the test continued, even though the elapsed test time was the same twenty minutes in both cases. This study was also designed to study the efficacy of the new prompts. When asked after the study, the Graduate Assistants scoring the essay-prompts and the students doing the research also did report a difference in the length or dedication to the answers for the two later prompts. This caused the research design decision to simply invert the prompts, making essay-prompt one on the pre-test become prompt three on the post-test, and essay-prompt three on the pre-test become essay-prompt one on the post-test. Prompt two remained the same in each test. For the comparison of scores, the beginning scores for prompt one in the first essay-prompt position, when compared with the same prompt in the last essay position, the post-test scores were 3.45% higher. The beginning scores for essay-prompt two in the second essay position when compared to the same essay-prompt, the post-test scores were 4.25% higher. The beginning scores for essay-prompt three in the third essay-prompt position when compared with the same prompt in the first essay-prompt position, the post-test scores were 28.95% higher. The average of all scores for all three prompts at the
beginning of the semester was 4.03, while the average of all scores for all three prompts at the end of the semester was 4.44, indicating a 10.34% improvement in the average scores within one semester with approximately 75 days elapsed during the semester between tests. The one-tailed t test indicated a confidence within 87.11%. This was a sufficient result to move forward to the Wagner Study One for the Autumn Semester 2011.

**Qualitative Comparison of Wagner Study One and Monmouth Study Two**

The two studies represent two different ways of embedding an experiential component into the syllabi of two different business classes as a way to improve undergraduate business student critical thinking skills. In the Monmouth University Entrepreneurial Studies program (Study Two), all students participate in the experiential exercise of creating and starting up a new company. Therefore, there is no control group as there is in the experiential component at Wagner College (Study One). In Study Two, all of the students are participants in developing the product launch plan and the main part of their grade is the performance of each member of each team relative to the tasks assigned to them to achieve the entrepreneurial start-up. In Study One, the courses used for the research are a traditional Consumer Behavior (course designation Mk 301- Autumn Semester 2011) and Advertising (course designation Mk 311- Spring Semester 2012) course with the exception of the marketing experiential component, which is worth 20% of the grade. The instructor acts as the advertising agency account executive to each of the clients, and provides his expertise and experience in support of each team in order to for them to meet the needs of the scope of work within the semester. In the Monmouth Study Two, the instructor acts as Chief Executive Officer of the new company and provides his experience and support to each individual group and to the entire class to meet deadlines and accomplish their tasks in order to launch their chosen product or service within the semester. All students participate in the
selection of the product or service they will launch, and the final decision as to which product or service to launch is mutually agreed by the students in the class and with the instructor. In the case of the Wagner marketing experiential component (Study One), the instructor interviews a number of prospective potential business clients (actual businesses), and the individual students elect to choose a company in an area of interest that appeals to them, or alternatively choose not to participate at all and take the traditional final exam. The students in the entrepreneurial class at Monmouth University (Study Two) were more heterogeneous, representing different business concentrations. The class contained a mixture of business majors performing all of the business functions including finance, accounting marketing, business law, and so experienced the difficulty of combining many separate business functions into a single project. Conversely, students in Wagner College (Study One) were more homogeneous, consisting from primarily marketing majors and minors. They learned to see various approaches and to appreciate the contrasting ways of communicating their marketing messages and applying their marketing tools to different business types in a single semester. Furthermore, the Monmouth University program had two classes per semester with 67 and 55 students respectively in total participating in the entrepreneurial start-up while the Wagner Study One was only one class per semester and had 18 and 19 students participating in the marketing experiential component. They also had a control group that was not participating in the marketing experiential component at all, and presumably was able to see a difference in that comparison.

While this author believes both classes are pedagogically superior to standard business classes in their impact on and improvement of the students’ critical thinking skills, there are advantages and disadvantages of each. Both classes provide real experiences to the students, and a quality simulation of business relationships that are generally not achieved with project based
learning, internships, case analysis, and computer business simulation programs. Both classes can provide the students with ongoing relationships of value. The Wagner Study One provides practical marketing experiences that can be used in the future, with specific emphasis on the creativity required as a part of an Advertising or Public Relations agency. The Entrepreneurial classes provide a real world simulation of the aspect of risk and reward in entrepreneurial decision making. Because the students in the entrepreneurial class at Monmouth University (Study Two) were more heterogeneous, representing different business concentrations, the students were able to see how different functional departments might work together to accomplish an overall business task. Therefore, they not only learned to apply the domain knowledge of finance or accounting to a real experience, but also how that application would be perceived by other functional groups and the CEO. While students in Wagner College (Study One) were more homogeneous, consisting from primarily marketing majors and minors. They not only learned to see various approaches and to appreciate the contrasting ways to communicating their marketing messages and applying their marketing tools to different business types in a single semester, they received feedback on their approach from a real world client, their instructor acting as the agency account executive, and other students in the class. Their exposure to various creative approaches to each business was invaluable.

The Monmouth University students were given three Critical Thinking essay-prompts while the Wagner College students were given a survey with three questions and two Critical Thinking essay-prompts. Both were given exactly 20 minutes to complete their respective prompts. Both groups did a presentation at the end of the semester to reveal what they had accomplished. The Monmouth Study (Study Two) was a more formal presentation at the end of the semester including guests outside the class, while the Wagner Study One presentation was
more informal and contained a valuable and honest feedback component from business clients, the instructor and other participating and non partcipating students in the class that had come to know about their creative objectives throughout the semester.

**Qualitative Opinions of the Participants**

The opinions concerning these teaching methods will be described and discussed independently for the two institutions and the two course types in three independent categories, (1) instructors opinion, (2) business participants’ opinion and (3) the students’ opinion. Note that all of these three categories have or may have different or even contradicting interests and perspectives. The summary of these different perspectives will be presented in the conclusion of this paper.

**Opinions about Courses Taught at Wagner College**

**The Instructor’s Perspective**

The overall professional judgement of the instructors is that this form of pedagogy is very effective in the application of the course’s domain knowledge. The students learn the domain material better than the same course taught without the experiential component, gain context from the client representative’s perspective, and obtain an understanding of the expected “pace” of business in the “real world”. Some instructors believe that the class time dedicated to the experiential teams result in a reduction of the amount of time allotted to lectures and discussion. However, this time trade-off is partially offset by the additional time the teams need to spend outside the classroom to prepare the marketing deliverables. The involved instructors unanimously agree that this type of course demands considerable time from the instructor, so that he/she must act to stimulate communication between the clients and the student teams. All the involved instructors reported increased activity in helping the teams with their final marketing
deliverables because, as they expressed, their reputation is “at stake” with the client and the students. The instructors also pointed out that they must have spent considerably more time and effort than in a regular class to understand the client’s business and sufficiently initiate the students’ activities. All instructors agreed, however, that the experiential component is much more effective when the students have the opportunity to voluntarily choose their client team as opposed to be appointed. The students made this clear in their evaluation forms and informal feedback, and the instructors could sense the motivation of the student toward their chosen field during the semester. After all, since the majority of the registered students were second semester juniors or seniors, many were taking classes to find or assess the validity of their chosen career plan. Gaining experience in their presumed field of interest was paramount to reinforcing this career plan on their resume. With this voluntary approach, the student is presumably working on a type of business that he/she has some interest in for their future. Instructors also concluded that students within the teams are motivated toward those components of the marketing assignments to which they have better background or abilities, such as the ability to draw or a talent or experience in graphic design, etc. Most of the instructors agreed that the scheduling of the student team meetings and establishing communication between the students and the clients is challenging. For example, students have spring breaks, long holiday weekends and times allocated for college sports, while businesses operate on a continual basis. All the instructors involved believe that the final student presentations to the client representatives were a unique learning exercise because part of the feedback was received from an active businessperson and the professional feedback and resulting discussion was “eye opening” for the students. While the instructors were convinced that the experiential exercise improved critical thinking skills of the students, the assessment results collected via essay-prompt evaluation did not consistently prove
to be statistically significant. The students seemed to put more effort into the pre-test essay-prompts as opposed to the post-test prompts. This coincides with findings by Celuch & Slama (2002) that students tended to over perform on the pre-test essay-prompt scores.

The essay-prompts were reviewed by a number of uninvolved instructors and an unrelated research organization within Wagner College. Great pains were taken to ensure that the Graduate Assistants (GA’s) that scored the essays were objective, and the NSF Solo Taxonomy’s scoring rubrics were used in a reliable and valid way (Biggs & Collis, 1982; Chan, 2002; Hattie & Purdie, 1998). However, some instructors believed the GA’s training in the scoring process may have been insufficient to understand the nuances of scoring critical thinking in an open essay. The scoring was reviewed by the author of this dissertation, and the training of each GA was consistent. However, the training process was not exhaustive. Part of the effect of this can be seen in the difference in the pre-test scores between the Autumn Semester 2011 and the Spring Semester 2012. In Wagner Study One, the pre-test scores improved by 32% from the Autumn Semester to the Spring Semester of 2012. In Monmouth Study Two, the pre-test scores improved by 16% from the Autumn Semester to the Spring Semester 2012. While there could be many causes for this improvement in score, including an improvement in students’ critical thinking skills, another part of the improved scores could be the different scoring style of the one GA that was changed from semester to semester. In future studies, the instructors that participated in the study and their colleagues familiar with the research, would suggest that professionals skilled in assessing critical thinking essays should be used to score the essays. It is also the opinion of the involved instructors that the students did not take all the provided 20 minutes to respond to their essay-prompts, particularly when the post-semester essay-prompts were given. This was particularly evident in the Spring Semester of 2012. Some instructors
argued that because the prompts were anonymous and did not affect the students’ grade, the students had limited motivation to apply their maximum critical thinking skills on the post-test.  

**Clients’ Perspective**

Initially all of the clients loved the concept when they were first recruited and decided to participate. As the research matured in each new semester, it was easier to obtain new and diverse businesses to participate in the program. Once the clients understood the experiential component, they were the ones who received the benefits of free labor from a team of marketing undergraduate students. They were generally receiving marketing deliverables (as most clients did not have the in-house skills to produce), and they obtained the consultation of an experienced business instructor. In addition, many of the clients responded that they could (and many did) take advantage of the available Wagner College infrastructure, using services like the library, the print shop, the IT department, graphic arts computer programs and applications as well as the provided office and classroom space. Most of the interviewed clients’ representatives expressed that they took pleasure in sharing their business experiences with the students and the instructors. The general opinion of the clients was that they benefitted most from students’ creative ideas for their businesses (often referred to by the clients as a unique perspective), and the students’ enthusiasm and a willingness to work on and try new things. It also became evident from the interviews that the student teams seemed to fall short of client expectations when it came to the practical application and the execution of the “scope of work.” While the critical thinking skills of the students improved, their application of those skills to their particular business did not develop sufficiently during the course of one semester. This coincides with the current literature that there is a considerable skill gap in CT skills between current undergraduates and the expectation of the workplace (Andrews & Higson, 2008; Casner-Lotto et al., 2009; Cotton,
2001). In many ways, this observation alone justifies the need for this type of pedagogical approach. It was also found that considerable time must be initially invested by the client representative to orient the students to the clients’ business issues, and their marketing challenges before constructive work can begin on the agreed “scope of work”. It was typical in all the Wagner Studies that the students needed considerable orientation to the businesses. This was accomplished in many ways depending upon the type of business and their requirements. Once the student teams were established, a basic research assignment was included. This research was done to acquaint the student with the clients’ business in particular, and the industry in general. As mentioned, in virtually all cases the client representative addressed the class, for approximately 20 minutes, with a summary of their business and some examples of the marketing problems they would like the teams to address. More often than not, the student teams also had to physically visit the business. These visits could last as long as two hours and would normally include discussions with other employees of the company. These meetings were designed to assume many of the elements of an orientation session (minus any Human Resource issues). All existing marketing materials were given to the students at this time, and the students were free to ask questions about the business. Additionally, the student teams were learning about the business from the instructor as a by-product of the negotiation and development of the scope of work. Once the scope of work was sufficiently negotiated, the teams were assumed to be “ready to go.” Furthermore, many of the successful marketing initiatives, (e.g., blogging or email marketing campaigns) need to be continued after implementation to maximize the return on investment. In many cases this has been resolved through ongoing internships. In some cases, this continuation is not a smooth transition. In the opinion of most clients, the student groups should be continued beyond a single semester, as is possible in the Monmouth University
program. This idea of continuity is also supported by the critical thinking research reported in the article by Hernandez-March et al. (2009).

Specific comments by clients include:

- “I think this idea opens up the options for a variety of projects such as social media, partnerships with non-profits, individual/corporate sponsorships and event planning”
- “From the very first meeting, these students have had creative and innovative ideas to reach out to students and administrators”
- “Students tend to be creative, come to the table without biases and are eager to work”.
- “Each team provided strategies to develop additional programs and events to bolster gate admissions and organizational revenue”
- “WOW! WOW! WOW! The instructor just shared the video [that the student team produced] with me. It truly brought tears to my eyes. I look forward to sharing the video with our upcoming Board of Trustees meeting next week”
- “Thank you and I would like to participate again next semester. Should I send you one or two project descriptions for your review?”

In their final comments during presentation, and often in written email correspondence, many of the clients specifically mentioned terms like the students’ ability to think on their feet, their creativity, their attention to detail, the depth of thought that went into a particular marketing delivery. Most were impressed by the honesty and integrity of the students’ process. These are many of the standards used in assessing critical thinking. Many of the skills specifically attributed to critical thinking.
Students’ Perspective

The students overwhelmingly liked the option of participating in an experiential learning exercise. While between 50% and 60% chose to participate, many of the students that did not participate said that they did not participate owing to time or travel constraints. For those that did participate, most believed they gained an invaluable experience, as evidenced by the fact that many of the participating students use this experience on their resume in the same way as an internship might be used. On rare occasions, there were some comments from those that did not participate that they felt somewhat “left out” during class discussion regarding one of the client businesses, but the large majority believed the entire class was better because of the experiential component. On the other hand, travel and logistics did present some challenges. Many of the students did not want to travel off campus, or meet with their groups outside of regularly scheduled class hours. Many also stated that it was a considerably more work than they had anticipated.

Below are some direct student comments that reflect the student sentiment about the syllabi including the experiential component:

- “This is a good option since some students enjoy out of school learning rather than studying for finals”
- “This is a great option. However, due to time constraints, it is not possible for many students to take advantage of it”
- “This offers hands-on work and real experience, and the two choices [volunteer decision for participating or not participating] make the whole class happy”
- “I was able to get a feel for the marketing field in the experiential group”
- “Experiential teams were “really” helpful”
Opinion of Other Participants

Other specific participants included the Graduate Assistants that aided the authors with the quantitative research, client participants that were not specifically the client representative, and other professors that provided advice during the research process. Their feedback during the course of the research process helped to formulate the perspectives shared by the authors of this paper.

Opinions about Courses Taught at Monmouth University

The Instructor’s Perspective

While the Monmouth Entrepreneurial Studies Program is popular with students (see below), the instructor found that the classes are not particularly scalable to other instructors and a program expansion in its current form. Instructors for this type of program need a special commitment and relevant entrepreneurial experience. The instructor’s workload is considerably more than a class without the entrepreneurial component. A specific communication system needs to be established (it is accomplished largely by computer at Monmouth), which the Director of the Program believes requires constant monitoring and feedback from the instructor. In the case of the Monmouth University entrepreneurial program, there is real money on the line. Therefore, the students get a taste of true business risk. While the students benefit from this exposure because it is a difficult concept to teach in the classroom, the instructor needs to be on top of each project. As stated above, in the Wagner College experiential component, continuity of service has been a problem with some of the Clients. In the Monmouth program, this continuity problem has been partially addressed because the Entrepreneurial Studies class develops the start-up company, and the small business administration class is available to continue the progress of the start-up beyond the initial semester. Because of the functional team
approach, there must be ground rules set at the beginning of each class. The instructor lets the
students know there will be additional time spent outside of class (generally 15 hours per week)
and that absences will not be tolerated (he generally allows one absence per semester) In
exchange, the student will receive “real life” business experience, and an entry on their resume
that could be more valuable than any internship. The classes also result in a developed business
concept, business plan and launch plan that can easily have value to the students of Monmouth or
an outside entity for purchase from the University.

Opinion of Different Partners Involved Into the Activities of the Entrepreneurial
Experiential Component

Contrary to the experiential program at Wagner College, the participating companies
involved in the Monmouth entrepreneurial experiential program are often treated strictly as
vendors. While the “clients” in the Wagner College program are asked to participate in a sort of
three way education of the students, the participants in the entrepreneurial program at Monmouth
University are generally not asked to play that role. The instructor interviews the potential
participating companies to orient them to the program, but they are selected based on the typical
vendor performance evaluation. The instructor, particularly in the entrepreneurship course, lays
out the ground rules to the potential business partners and makes it clear there is some
“mentoring” that is expected when the opportunity presents itself, but their primary role is to
perform the function as they would in a real business environment. It is possible that if the
product is launched successfully by the class, they will become the vendor of that company.

Again, contrary to the Wagner College program, the business partner in the
"entrepreneurship course" has grading responsibility. The experiential component is graded
based on the instructors observations, the functional team leader’s peer evaluation and the
evaluation of the business partners involved with that functional group. In the Wagner program, the grade for the experiential component is decided exclusively by the instructor. There is no peer evaluation, and the clients’ do not participate in the grading process.

**Students’ Perspective**

The courses for the Entrepreneurial Studies Center are highly popular, and generally receive excellent reviews from the students. Some comments in the ratemyprofessor.com website about the entrepreneurial class include:

- “He is one of the best Prof. at MU. He is very clear about the class. 1st day of class he tells that he requires you to put effort. It is more like a business environment then a class. If you are taking 18 do not take this class because, there is lot of work for this class”.

- “Buzza is the best professor without a doubt. His class is absolutely amazing and the coolest people ever take his class, so if you’re one of them, take it!!”

In an effort to complete the entrepreneurial project within the semester for the Monmouth entrepreneurial program (course designations BM 451/434), deadlines are common. The students come to understand the importance of project deadlines as they will be accustomed to in the business world. It is more work than a normal class for the student. There are peer evaluations so students cannot easily “hide” from their responsibilities inside or outside class. Furthermore, there needs to be “buy in” from the students to optimize the value of the classes. Obviously, not everyone’s idea can be selected. The selection process is fairly structured and the entrepreneur product is democratically chosen, but there is always a chance that some members of the class are not enthused by the selected project. The instructor’s credibility is essential to the fairness of the selection process and to achieve this “buy in” from the students.
As a tangible benefit of the program, the students often come to the instructor for letters of recommendation and/or help with the wording used for their entrepreneurial experiential component on their resumes. It is apparent that students see the benefit of the program for career planning purposes. On the other hand, there is a time component that is difficult to manage. For example, because of the Hurricane Sandy storm in New Jersey, the teams lost momentum and had to scale back expectations for the semester. Still most students that participated reported that they cherished the learning experience.

Experiential Learning and Critical Thinking

According to Buddensick and LoRe (2010) business education has faced two particular criticisms from potential employers. One is the narrowness of the curriculum, and the other is the failure to expose students to the social environment, specifically the social context within which business operates. They argue that internships can be successful in fulfilling the narrower curriculum requirements, while service learning/civic engagement can be justified if it results in enhanced student awareness, increased awareness of their communities and the social context of their broader issues (Buddensick & Lo Re, 2010).

The emerging view, according to the a variety of authors, is that business programs should graduate students that not only have narrow functional capabilities but have also (1) developed a sense of civic and social responsibility (2) been exposed to the external social environment, and (3) developed an awareness of intercultural sensibility (Buddensick & Lo Re, 2010).

Buddensick and LoRe’s published research with the author of this dissertation (Appendix A) also resulted in a survey of students enrolled in the exact same Wagner College course, with the only difference being some students participated in a service learning
component, while some did not. They then conducted a survey of the 79 students at the end of the semester. The results are illustrated in the table below:

Table 26
Survey Perception of Skill Sets of Students Selecting “Above Average” Following Service Learning Participation

<table>
<thead>
<tr>
<th></th>
<th>Service Learning (n=39)</th>
<th>Non-Service Learning (n=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision Making</td>
<td>64%</td>
<td>35%</td>
</tr>
<tr>
<td>Team Work</td>
<td>67%</td>
<td>53%</td>
</tr>
<tr>
<td>Civic Awareness</td>
<td>51%</td>
<td>28%</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>26%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Of notable difference, 51% of the students that attended the service learning group had responded that they had become more civically aware, versus 28% that did not take the civic engagement course (Buddensick & Lo Re, 2010).

What is of specific relevance to this dissertation is the perceived increase in the decision-making skills of those students that did participate in the experiential component of this class, from those who did not. Over the course of one semester, 64% of those participating perceived their decision-making skills to be above average as opposed to 35% for those students that did not participate. This study by LoRe and Buddensick with business department students at Wagner College was part of the inspiration of this author to pursue the research that has become the subject of this dissertation. The experiential exercise used in the LoRe, Buddensick research was quite different in that it was related particularly to the Wagner Plan mission of including civic engagement into the curriculum in support of a Liberal Arts education. But this formed the genesis of the development of the experiential component that was subsequently developed for this particular dissertation research for Wagner Study One.
An Examination of Key Elements of This Research Study

The Marketing Experiential Component and its Comparison to Other Styles of Teaching

Critical Thinking

This author continually adjusted the experiential component throughout the research process. Because each client is in a different business, has different management styles, different expectations from the student teams and specific marketing needs, the instructor had to continually adapt his management style to balance the needs of the client with the need to meet course objectives. This is one of the reasons the pilot studies were so important, for instance, in the first Pilot Study, the Spring House knew exactly what they wanted from the student teams. They required a DVD that they could use for fundraising purposes. They already had considerable marketing promotional materials (e.g., brochures, website etc.) from which the students could form an understanding of the current positioning of the service in the marketplace.

On the other hand, the owner/entrepreneur in charge of the Mediation Company was very new to the business, and was still formulating his market positioning when we first engaged with him as a client. In stark contrast, he had virtually no marketing materials, had no website, and was unsure of which segment of the business he wanted to target first. As it turned out, the students did shoot and develop a DVD for fundraising purposes, repositioning the Spring House in the DVD as a positive, courageous and upbeat step in the women’s’ transition to independence. In the case of the Mediation service, considerable marketing time was spent narrowing the strategic focus of the owner/entrepreneur before the marketing materials were developed.

Therefore, the marketing experiential component not only provided the students with critical thinking skills in the performance of their tasks, but also in the assessment of their clients’ needs, their assessment of what skill mix the team had in order to negotiate their scope of
work. It has a spirit of adventure, an interaction with various perspectives and the unknown that cannot be duplicated by the other forms of critical thinking in the literature.

For example, Reid (2010) found statistically significant success in her students’ critical thinking scores in the course of one semester in her research design using an on-line course. Since this research study found statistically significant improvement in the students’ critical thinking scores in only one of the four Study semesters, I can appreciate this achievement. However, when compared to the experiential component designed for this dissertation, clearly the Reid method does not involve the human interaction and unpredictability of the experiential component.

Hernandez-March et al. (2009) did a qualitative research in Work Based Learning (WBL). This author agrees with WBL as an excellent tool to improve students’ critical thinking skills. However, when compared to the experiential component of this research it does not reinforce the teaching of the subject’s domain knowledge in the same semester, and does not allow for the combined perspectives of instructor, client and team members concurrently as the marketing experiential component does.

Aldas, Crispo, Johnson and Price (2010) extolled the virtues of internships in their article. I happen to know these authors and have worked with them for years in my role as Director of External Programs and their role in Career Development at Wagner College. Internships, or practica as they are called, are required in the capstone course at Wagner College. They do provide a valuable orientation to the workplace. However, the feedback from the students in that class are that the practicum often consists of simple or boring tasks, the supervisors seldom take the time to teach new skills, and the companies for which they work are usually not interested in advancing the students’ domain knowledge. By design, there is little involvement by the
instructor in the process with the exception of an evaluation form and a log sheet. Again, it is an excellent tool for experiential learning, but does not combine the higher level business work required in the scope of work of the experiential component, and does not provide the instructor’s perspective.

In a more modern approach to teaching critical thinking skills in the capstone program at Wagner College, Dr. Donald Crooks has introduced a computer simulation named Capsim into course designation BU 401. In an interview with Dr. Crooks on Thursday, August 1, 2013, he explained that this program helps improve the critical thinking skills of his students because it tests an accumulation of knowledge, provides various perspectives because of a team dynamic that involves peer evaluation, and includes various perspectives because the grade is based on the relative position of the student teams in the same class. More like Monmouth Study Two, the teams are organized functionally (i.e., finance, marketing, management). The learning curve to orient the students to the rules of the game is approximately three to four weeks of a thirteen week class. Since the rules are universal, this pedagogical approach is highly scalable.

In the author’s view, this represents an excellent pedagogical tool to improve students’ critical thinking skills. In contrast to the experiential component of this research, the Capsim class is a computer simulation. The experiential component deals with “real world” companies and provides the additional perspective of the client representative. The research has been designed such that the selected clients participating in the experiential component are local small businesses. More than 50% of all new jobs created in the United States are created by small businesses. The Capsim program is based on large companies, who are on the New York Stock exchange and includes a number of macro issues. Since the Capsim is a capstone course, the content of the computer program purposely spans all business functions, and the assumption is
that the students already have the required domain knowledge from previous undergraduate classes. The experiential component experimental class is teaching the domain knowledge of the subject concurrent with the exercise. In the Capsim class, the student teams are competing with each other for results. In the experimental class, cooperation is encouraged among the teams to provide the best result for the client.

As stated in the literature review, there are a number of examples of methods of teaching critical thinking skills in the business classroom. Some include collaborative learning (Yazici, 2004). Ngai (2007) documented that using a project based team approach for undergraduate e-commerce activity in his business class would enhance students CT activities. Celuch et al. (2009) performed research which correlated CT skills with self-identity of his business students. He designed his research around a process of modeling CT and holding the students responsible for improving their individual critical thinking. Peach et al. (2007) used a series of case studies to assess CT skills among business students, as well as a total enterprise computer simulation in a business capstone course. The significance of critical thinking for marketing in particular has been well documented (Catterall et al., 2002; Celuch et al., 2009; Celuch & Slama, 2000; Easton, 2002). Some examples of specific tools and techniques used in marketing classes to improve CT skills include: (1) debate (Roy & Macchiette, 2005) (2) case analysis (Klebba & Hamilton, 2007) (3) keeping journals (Aitken & Deaker, 2007) and (4) complete curriculum revision (Wee et al., 2003).

In the opinion of this author, none of the alternative methods from the above literature offer the “elements of thought” as organized by Paul & Elder (Paul & Elder, 2009, p. 3):

1) Purpose: in the experiential component, the students must set goals and objectives for which they will be graded and will meet the expectations of the client and the instructor.
In addition, the students’ have the added challenge of completing those objectives within the semester.

2) Question at Issue: in the experiential component, the student teams are also involved in defining the business problem, and as with the examples used above, with the help of the instructor, they need to use critical thinking skills to determine if the client is defining the problem correctly.

3) Information: in the experiential component, the students need to do general research as part of their orientation, but also need to be wary of information given by the client.

4) Interpretation and Inference: through the negotiation of the scope of work, the students in the experiential component must interpret the project into a final marketing deliverable.

5) Concepts: While the concepts and the theory of the subject matter are covered in class through the text, lectures and discussion, the students must now apply certain segments of that theory to a specific “real world” business challenge.

6) Assumptions: Nothing can be taken for granted. Presuppositions are irrelevant to completing the scope of work.

7) Implications and Consequences: in the final presentation, the students are given a perspective on their final deliverables by both the client and the instructor. For example, in the case of Casale Jewelry, the magazine advertisement created by the team was used by the client. The radio advertisement in Appendix BB, which the instructor thought was a far more effective communication, was not used because of client cost constraints.

8) Point of View: the experiential component has at least three points of view at work at all times. The instructor, the client and the student teams all have a different perspective on
the project. In many cases, there are also divergent points of view within the student teams, and with the client if there are multiple client representatives.

The Entrepreneurial Component and its Comparison to other Styles of Teaching Critical Thinking

As a way to discuss the validity of the entrepreneurial program of Monmouth Study Two to teach critical thinking to undergraduate students, comments were added to the Elder and Paul (2009, p. 2) list expected results of a well cultivated critical thinker.

1) A well cultivated critical thinker raises vital questions and problems, formulating them clearly and precisely. With the help of Professor Buzza acting as CEO, the students in the Monmouth program must identify the vital questions and problems associated with the start-up operation early in the semester. They need to assess the funding requirements since real university funds are at risk. They need to select viable vendors, protect their idea or product legally, organize the class into functional groups and identify problems and questions early enough in the semester for them to be solved quickly.

2) Gathers and assesses relevant information, using abstract ideas to interpret it effectively. In the case of the GPS pet product launch in Autumn Semester 2011, the students and the instructor needed to research and understand the underlying technology in order to activate the product. They also needed to be well informed about the cost, and alternative uses of the technology. Reliable research must be conducted to understand the existing market as it is now. An assessment of the positioning of other potential competitors also requires thorough research. They also had to gather information about their potential target segments. For example, there was evidence that this same technology could be used for a product to help improve salesmen productivity at a large pharmaceutical firm.
3) Comes to well reasoned conclusions and solutions, testing them against relevant criteria and standards. When researching the salesmen productivity option, the instructor and students concluded that the competition in that market would be more difficult to handle, and chose the Pet tracking product instead.

4) Think open-mindedly within alternative systems of thought, recognizing and assessing their assumptions, implications and practical consequences. The students must take into account the total situation. For example, what vendors would be willing to work with a student start-up? Would they be willing to provide the services and support within the timeframe of a semester. Would funding become available to this structure if a marketable product were to be developed? There are many distractions for students during the semester. They have at least 3 other courses, as well as their own personal schedule of appointment. This type of exercise requires the student to stay focused on the team goals despite these distractions.

5) Communicates effectively with others in figuring out solutions to complex problems

While developed into functional teams, team leaders need to keep their eye on the main goal. The project can only be finished if each functional group is able to complete its function in the time allotted. While the instructor plays the role of CEO, the students will gain valuable experience by observing how the coordination of various independent functions can come together into a single project goal. This will only happen if the communication within and among the teams is excellent. The instructor establishes a Facebook type communication system so that there is regular open communication between the teams and the instructor.
Discussion of the Use of the Solo Taxonomy for Assessing Essay-Prompt Responses to Critical Thinking Prompts

One of the challenges of this research is to find a valid and reliable tool to assess the essay-prompts. As stated before, the NSF Solo Taxonomy has been battle tested for many years, and was the selection of this researcher.

Below are the seven scoring levels used in this research, followed by selected comments to improve and clarify the scoring grid. These comments were provided by Dr. Len Rogers in an effort to improve the efficacy of this scoring grid for future research. I agree with Dr. Rogers, and would recommend these changes be made in future research.

1. No Understanding demonstrated. Response does not address the question or restates the question.

2. Limited understanding of topic. Responses focus on one conceptual item in a complex case and are not accurate or partially accurate. Comment: logically, this means that it is not accurate and it is not partially accurate. I think what might clarify is to say, “It is not accurate or partially accurate.”

3. Limited understanding of the topic. Response focuses on one conceptual item in a complex case and is accurate. Comment: Should clarify whether the accuracy is referring to the response or the conceptual item.

4. Understanding of several discrete components. Response is a collection of multiple items that are not related within the context of the exercise.

5. Understanding of several components that are integrated conceptually. Response may not prioritize information or be appropriate to the scale of the question. Comment: This actually represents separate requirements on whether or not the responses are in
any sort of order of importance. It is also not clear whether the scorer is measuring
the understanding of the components, the degree of integration or both.

6. Understanding of several components that are integrated conceptually. Response
prioritizes information and is appropriate to the scale of the question.

7. Understanding demonstrated at a level extending beyond what has been dealt with in
the question prompt. Response generalizes to situations beyond the scope of the
question.

Overall comment: These seven may be the National Science Foundation conception of
"critical thinking" but a little more logic may be added. An instructor using this 7-part analysis
should first re-write them into statements that are not open to so many interpretations. Item 1 is
almost OK as it states "no understanding demonstrated." This is a clear instruction. But then
there is another possibility, a sort of after-thought, that the question is restated. Are students who
possess both components considered at the same level? Item 3 how many issues define a
complex case and which does the instructor consider “accurate” refer to?
Chapter 6: Conclusion

The research is encouraging in that it indicates an improvement in critical thinking scores from the beginning of the semester to the end of the semester for three of the four research semesters of Wagner Study One and Monmouth Study Two (as well as Pilot Study Two), with the Spring Semester 2012 at Monmouth University as the only exception. As explained in the discussion section, the instructors observed a difference in senior student motivation to take the test in the Spring Semester 2012 which may partially explain the lower critical thinking scores for that semester. In the Autumn Semester of 2011 of Wagner Study One, the participating students did show an improvement with statistical significance from the control group based on the one tailed t-test.

However, in the case of the Wagner research, where they did have a control group that took the identical class with an identical syllabus and the same professor, the results of the mean scores for those that participated improved at the end of the semester with a mean score that improved by 16.94% within an 89% confidence level from those that did not participate.

Despite some improved critical thinking score results, the research did not consistently statistically prove that the experiential component in the case of the Wagner Study One or the entrepreneurial component in the case of Monmouth Study Two would improve critical thinking skills of the participating undergraduate students in the course of one semester. The author of this dissertation believes the standards for this research were set high. The majority of the literature research on this subject does not succeed in showing critical thinking skills improvement in the course of one semester, and in many cases, in contrast to this research, teach critical thinking skills directly. In Reid’s successful study (2010), she redesigned the course to be taught around Halpern’s (1997) curricular design. As a matter of fact, many of my colleagues at Wagner
College, after participating in a number of the CLA critical thinking studies that compared freshmen critical thinking scores to senior critical thinking scores, had determined that it would be quite difficult for one section of one course to have an impact on the students’ critical thinking skills in only one semester, no matter how it was done.

In the case of the Wagner research, there was no change to the syllabus at all, with the exception of the experiential component instead of a typical final exam. This means no restructuring of the course work is required for administrative approval. Also, besides the occasional mention that the improvement of critical thinking skills was one of the objectives of the course, no critical thinking skills were taught directly to the students. Therefore, this author assumes that the improvement of scores of the participating group was mainly a by-product of the participation in the experiential exercise. Another advantage is that many business courses can embed an experiential component into their syllabus. For example, one of our accounting professors does do non-profit tax work with student volunteers. This could easily be designed into an accounting experiential project for many of the clients used in the Wagner Study, as well as other potential clients.

Another benefit of this research design, in addition to its limited adjustment to the syllabi and curriculum of the business department, is the impact on the instructors. It is a different experience to work with the student teams in the uncertain environment of working with a “real world” client, and the relatively certain environment of preparing a lecture, leading a class discussion, or administering a typical final exam. This has two immediate implications that I can see. Instructors prone to teaching more traditional class may receive the benefits of developing and modernizing their skills and applicability of their skills. A more broad implication of this type of course structure might be the improved productivity and improved value and relevance of
the adjunct professors that work as instructors on a part time basis and have a full-time executive position in their field of expertise.

As explained in detail in the results section of this dissertation, the observations of the instructors, clients and students participating in the study were overwhelmingly positive about the experience, particularly in the case of the Monmouth University entrepreneurial program. The Dean of Columbia University, in an interview on CNBC on August 6, 2013 pointed out a considerable trend toward student interest with entrepreneurial programs and small business job opportunities at Columbia University. While not a reason in itself for other researchers to continue this study, this is additional evidence that the choice of institution and clients in this study are in keeping with a relevant trend.

This brings us to the question of scalability. In one of my interviews with Professor Buzza, I asked him directly if he had ever considered expanding the successful Monmouth University entrepreneurial program. He replied that it was challenging to find instructors that would invest the time necessary for his format, and also had the entrepreneurial experience to manage the start-up successfully. He believed it was critical that the instructor had experience with a number of start-up organizations in order to manage the class properly.

As it relates to the scalability of the Wagner experiential component, one of our adjunct professors, Professor Nielson, generously agreed to test the experiential component in the Advertising class (course designation MK 311) in the same Spring Semester 2012 that this author Wagner Study One was being researched. She used the same syllabi as the advertising class of this author, but changed the research design such that the three experiential clients were managed one at a time, instead of over the course of the entire semester. She recruited the clients herself, and helped the students design the “scope of work” for each client. Her positive findings
and observations are included in the results section of this dissertation. However, as a result of this test experience, there is evidence that this experimental format can be scaled to other business instructors.

This paper also draws conclusions from the reports of subjective findings regarding the experiences of the instructors, students, clients and other related participants while conducting quantitative research in the two programs above.

In the Wagner marketing experiential exercise, it was a rewarding experience for instructors, clients and students. The instructors and students were exposed to current business practices in marketing, and the clients and their representatives became acquainted with a fresh academic approach to their business, and to the perspective, creativity and energy of the student teams. Students can receive letters of recommendation from the clients and their representatives and lasting contacts in their local business environment. In a time where discussion of the “skill gap” is prevalent in business media, this pedagogical form fulfils the needs of both employers and potential employees.

In the Monmouth entrepreneurial experiential exercise, the instructor becomes part of the community, raises money for the University, and creates a product or service idea that lasts beyond the semester. It is a rewarding experience for all concerned. The students obtain real exposure to the risks and rewards associated with the entrepreneurial exercise. The students also see how their functional skills (e.g., finance, accounting, law, etc.) fit into the small business environment. In a time where the country is encouraging entrepreneurship among younger people, this pedagogical form fulfils this goal.

Future Research Suggestions

While the qualitative feedback received from instructors, clients and students
participating in the studies were quite impressive. It is hopeful that another researcher will extend and apply this research to their syllabi in their field of study to prove that experiential exercises like those incorporated into Wagner Study One and Monmouth Study will improve critical thinking scores of students in the course of one semester. There are some research design items that should be reviewed before future research is conducted in order to obtain more definitive research results.

The research will need to be refined to assess further the optimal choice of client in the case of the Wagner experiment, or the appropriate start-up company in the case of the Monmouth University program. Abrami et al. (2008) suggests that experiential components in measuring critical thinking are not all equal. The type of experiential intervention and depth of the participation of the professor can be a major factor in the success of the program.

The author believes the prompts that were designed for both studies were well reviewed by experts, well received by the students, and effective. To further assess the prompts, the author had the three essay-prompts used in Monmouth Study Two approved for the Wagner College CLA study conducted with the business seniors at the end of the spring semester in 2012. Below are the specific instructions for that assessment tool.

**Task:** Choose a controversial topic or social problem that you have studied recently (topic or problem may be suggested by the professor in the learning communities). Critically evaluate at least two different sides or viewpoints of the issue. Next, consider possible solutions for solving the controversy or problem considering the impact on the local community, all the way up to a global level. For example, you may look at your solution within the perspectives of your town, region, state, the nation and/or the world. As you write your essay, be sure to pay close attention to grammar, syntax, and organization. This is a college paper that should
contain an appropriate level of sophistication and critical thought.

The author was the proctor of the exam. However, there were three significant changes from the research design of this dissertation.

1) The time given for the exam was 45 minutes

2) The exam was given in the computer room, and the responses by the student were in Microsoft Word, not hand written on blue booklets like in the research of this dissertation.

3) The responses were not anonymous, because the students were to be graded for their response. Their response would be worth 10% of their final grade.

These responses were then scored by the same GA’s that scored the essay-prompt responses in the study. Interestingly, these are the scores by GA for Spring Semester 2012 for the first two prompts:

<table>
<thead>
<tr>
<th>Course</th>
<th>GA # 1 Noreen</th>
<th></th>
<th>GA # 2 Joe</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prompt 1</td>
<td>Prompt 2</td>
<td>Prompt 1</td>
<td>Prompt 2</td>
</tr>
<tr>
<td>BU 400 CLA</td>
<td>4.2</td>
<td>4.27</td>
<td>4.48</td>
<td>3.96</td>
</tr>
<tr>
<td>MK 311</td>
<td>5.0</td>
<td>4.21</td>
<td>5.0</td>
<td>4.17</td>
</tr>
</tbody>
</table>

The above chart is a comparison of the end of semester Wagner Study One essay-prompts used in the MK 311 class as compared with the same end of semester essay-prompts from the senior capstone course (BU 400) used for CLA measurement for Wagner College.

As you can see, the ending-prompt scores for the Spring Semester 2012 averaged higher for Wagner Study One, than it did for the CLA study, using the same GA scorers despite the
longer exam period, the convenience of the Microsoft Word and the assessment of a grade.

The other issue is the difficulty of the prompts. The above chart is a comparison of the Wagner Study One essay-prompts used in the MK 311 class as compared with the first two prompts of the Monmouth Study two essay-prompts used in the BU 400 CLA class. This seems to indicate that the Monmouth Study Two essay-prompts were more difficult to score well on, which was consistent throughout the two studies.

Many of my colleagues have suggested that the scorers should be professional scorers of critical thinking prompts, as opposed to GA’s. However, time and time again, tests show that the inter-rater reliability of the GA’s was quite good. For example, the chart above shows that both Noreen and Joe scored the exact same average score for prompt one in the MK 311 course.
References


DeSimone, F., & Buzza, J. (2013a). Qualitative findings regarding pedagogical experiments in business classes performed in two colleges to improve critical thinking skills of the participating students. Manuscript submitted for publication.


doi:Article


ENGAGED LEARNING MODELS FOR CIVIC ENGAGEMENT

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ABSTRACT
Since 2001, faced with accounting scandals and the financial and economic crises, critics are questioning what is being taught in higher education? In response to the criticism that business education fails to expose students to the “real-world” social complexities, address moral turpitude, as well as instill a sense of civic awareness, institutions have added a variety of experiential activities. While case studies, role-playing exercises, internships, and service learning may bring to light real-world examples, enhance a sense of civic responsibility, and promote inquiry of broader global and social issues, we posit that civic engagement and incubator models go beyond these experiences, and show how these engaged learning modalities serve to: put into practice what the students are learning in the classroom; witness the imperfections and incompleteness of the models and frameworks read in textbooks; deepen student engagement of civic/public issues; extend the College’s connection to the community and strengthen its civic engagement mission; students’ positive exposure in the media reinforcing critical, civic and public speaking skills; foster a campus environment where students, faculty, administrators, alumni and community members are actively engaged; and allow instructors the opportunity to develop interactive teaching practices, knowledge and research agenda.

Keywords: Civic engagement, civic awareness, business, incubator system

1. INTRODUCTION
Recently, institutions of higher education have received much disparagement in terms of what is being taught, or more importantly, what is not being taught. These views have been expressed in articles in the popular press, in peer-reviewed journal articles, and in books. The New York Times’ (2010) article in, “Are business schools failing”, the author asks the question, in “the aftermath of a historic financial crisis …what are we teaching [our graduates] before they head off to the executive suite? In the Review of Business Research, the authors write: “Business education has faced criticism in recent years in both the narrowness of the curriculum and its failure to sufficiently expose students to the external working environment, specifically the social context within which business operates.” (Buddensick & Lo Re, Measuring the effect of Service Learning on Civic Awareness, 2010) And, in Datar, et.al.’s book (2010), they question whether business schools “do a good job of alerting students to the imperfections and incompleteness of the models and frameworks they teach.”

In response to these concerns and in addressing these challenges, schools are adopting diverse set of approaches such as: revamping their curricula, adding and/or removing courses/programs, and “linking knowledge to application through experiential learning” (Datar, Garvin, & Cullen,
While there are many schools at all stages of transformation, one such example is Wagner College. In the fall of 1998, integrating real-world experience with classroom learning, Wagner College instituted a new curriculum called the Wagner Plan for the Practical Liberal Arts. Each year, over 2,000 students in more than 30 academic programs work with the Staten Island community in enacting the “Learning by Doing” model that has become woven into the Staten Island community’s fabric. Since that time, many experiential modalities have taken place, such as: case studies, role-playing exercises, classroom visits to establishments, internships, service learning, civic engagement, departmental service learning/civic engagement initiatives and lastly, an incubator system.

In a prior study, Buddensick & Lo Re (2010) showed that students enrolled in service learning courses have enhanced student awareness not only of themselves, but also of their communities, as well as promoted student inquiry of broader global and social issues. In addition, in their paper “Measuring the Effect of Service Learning on Civic Awareness”, they argued that service learning models far surpass case studies, internships and other experiential activities in fulfillment of reflective practices. In this paper we propose two superior additional engaged learning modalities—the Civic Engagement and Incubator models—not only heighten the effect of civic awareness and responsibility, but also civically engage the students on an issue or issues of public concern.

The Civic Realty Model describes how a traditional real estate investment course was pedagogically transformed to expand the students’ practical knowledge of all facets and issues of the housing market, the Staten Island community, as well as assist our community partners with projects. The Incubator Model describes the development of a marketing incubator system to expose the students to issues of public concern and provide consultancy services to Staten Island and other local area communities.

With each of the projects, this paper will demonstrate how the Department of Business Administration has embraced the civic engagement higher-education imperative to enhance student and faculty learning, to promote the College’s image and deepen its role as well as make a positive impact in the community. Challenges, lessons learned, course outcomes and deliverables, and next steps for the incubator model are discussed.

2. CIVIC ENGAGEMENT (vs. SERVICE LEARNING) DEFINED

Civic engagement and service-learning are common-place terms in today’s educational system. Over one thousand institutions responded to a survey conducted by the National Resource Center (Tobolowsky, 2008) of which “more than 40% of responding institutions offer a service-learning component” (p. 98). Today, given the rise of academic journals, conferences, and organizations devoted to this type of pedagogy and learning, that percent is even higher. According to Imagining America, “A Resource on Promotion and Tenure in the Arts, Humanities, and Design”, “one should recognize that research, teaching, and community outreach often overlap.” As such, service-learning, civic engagement, or, publicly engaged academic work, can be defined as:

“...scholarly or creative activity integral to a faculty member’s academic area. It encompasses different forms of making knowledge about, for, and with diverse publics and communities. Through a coherent, purposeful sequence of activities, it contributes to the public good and yields artifacts of public and intellectual value.” (Eatman, 2008)

However, in the literature of higher education, a distinction is made between service-learning and civic engagement.
Service-learning can be defined as an academic study closely tied to community service through structured reflection. This type of learning connects thought and feeling in an “intentional way”, creating a framework in which students can explore how they feel about what they are thinking and what they think about how they feel. Through guided reflection, service-learning offers students opportunities to explore the relationship between their academic learning and their civic values and commitments. (Ehrlich T., 2000) Service-learning, “…ensure equal focus on both the service being provided and the learning that is occurring” (Furco, 1996). This combination of factors distinguishes service learning from internships, which are designed primarily to benefit the student, and volunteerism designed to primarily benefit the community. Thus, unlike internships and other practica, service-learning “instills in students a profound understanding of community responsibility.” (Tucker, McCarthy, Hoxmeier & Lenk, 1998)

Civic engagement is a broader motif encompassing but not limited to service-learning. It has been defined as "individual and collective actions designed to identify and address issues of public concern." (Ehrlich, 2000, p. 403) Civic engagement can take many forms, from individual voluntarism to organizational involvement. It can include efforts to directly address an issue or work with others in a community to solve a problem, and it can encompass a range of specific activities. Thus, civic engagement goes beyond Bringle & Hatcher’s (1996) service-learning model to deliver a course with an experiential component with the objectives to have: (1) a further understanding of course content; (2) a broader appreciation of the discipline; and (3) an enhanced sense of civic responsibility. Civic engagement allows students to go beyond being civically aware; civic engagement allows students to engage-in or take-on a topic or topics of public concern!

3. ENGAGED LEARNING MODELS

To underscore the importance of these engaged learning modalities and the institutional and departmental commitment made to this mode of pedagogy, the Business Administration Department began in 2008, to incorporate service-learning activities into the curriculum in a number of ways. Our goal was to provide students with experiences that not only enhance course content but also allow students to gain a deeper understanding of the social environment and their place in it, while providing a needed service to the community.

These initiatives have evolved deepening the call to improve and expand educational learning from a single or departmental service-learning model to: offering courses with a civic engagement component tied to course content, described herein as Civic Realty; and, offering a Marketing Incubator System.

3.1 The Civic Realty Model

The BU291: Special Topics—Real Estate Investments course was offered for the first time in Wagner’s history in the Department of Business Administration, in the spring of 2008. Instead of offering a traditional, in-classroom course, we chose to strengthen the civic engagement mission of the College and the Department, and elicited the help of not-for-profit organizations and businesses to deepen the students’ experiences of the course material with the idea of reciprocity—the community partners shared their real-world knowledge and the students worked on projects, revolving around a public concern, where man-hours were much needed. According to Mintz and Hesser (1996), these experiential practices must include and viewed under three lenses: a partnership should be grounded on collaboration, reciprocity, and diversity through which a partnership’s quality and integrity can be examined.

With this form of pedagogical learning, the choice of community partnerships is vital. The projects undertaken and the collaborative efforts/communication between the triad—community
partners, the Instructor, the students—all have to be well defined at the onset of the course. Among other characteristics, good partnerships are founded on good communication, respect, mutual benefit, and governance structures that allow democratic decision-making, process improvement, and resource sharing (Benson & Harkavy, 2001; Campus Compact, 2000; CCPH, 1999; Mihalynuk & Seifer, 2002; Schumaker, Reed, & Woods, 2000; Worrall, 2007).

During the spring 2008 semester, six business students enrolled in the Civic Realty course. They worked with the Staten Island Board of Realtors (SIBOR) as well as independent real estate agencies on Staten Island. These community partners were chosen as their daily work activities not only reinforced the concepts taught in the course, but they were also willing to become mentors and impart their practical knowledge, and allow the students to work on meaningful (and needed) activities enabling the transformation of our students from young adults/students to civically-engaged professionals.

The outcomes for the course can be viewed from 3 perspectives:
1. Students’ perception of acquired skills: life’s lessons, real-world education, springboard to continued service and possible future job referral/placement;
2. Actual student deliverables: helped to organize open houses, evaluated prices of homes, reflected and reported on the economic effect of the housing situation on Staten Island and the differences in the differing boroughs; and,
3. Assessed students’ skills: heightened critical thinking, civic thinking, written and oral presentation skills, time management, and problem-solving skills evidenced through their formal research paper as well as the students’ informal reflective journals that were required as part of the course.

The resulting civic realty work during the spring 2008 semester received public attention. We were cited in the Staten Island Advance Newspaper (Wagner College interns get education in troubled housing market, 2008) as well as the SIBOR Newsletter (Staten Island Board of Realtors Partners Internship with Wagner College, 2008). Additionally, due to the award of an internal institutional grant, we held an end-of-semester Civic Realty Symposium at Wagner College where the SIBOR, our partnering real estate agencies, Wagner’s staff and Administration, as well as the reporter from the S.I. Advance attended. At the completion of the semester, the Instructor of the course was able to attend the Triple Play 2008 REALTOR® Convention and Trade Expo which allowed the Instructor to gain and bring further knowledge of the topic into the classroom when the course was next offered.

During the spring 2009 semester, 24 students, from different disciplines, enrolled in this course; a 300% increase in enrollment and a 67% increase in multidisciplinary interest. The students worked with many independent real estate agencies not only on Staten Island, but in Brooklyn and New Jersey; and we added one additional not-for-profit organization to our community of partners: the Neighborhood Housing Services (NHS) of Staten Island.

The forging of these new community partnerships was cultivated prior to the beginning of the course and proved to be valuable. In many studies, community collaborators have stated that they value service-learning/civic engagement partnerships because they bring additional resources to the organizations and provide the opportunity to educate future professionals and community citizens (Basinger & Bartholomew, 2006; Gelmon, Holland, Seifer, Shinnamom, & Connors, 1998a; Gelmon, Holland, & Shinnamom, 1998b; Leiderman, Furco, Zapf, & Goss, 2003; Seifer & Vaughn, 2004). Our community partner in this Civic Realty project echoed the
same sentiments. According to Claire Mitchell-Dumas of NHS in the April 1, 2009 press release:

“This is a win-win relationship. NHS gets to reach out to students early enough to influence how they manage credit; while Wagner students get the opportunity to see how good money management and credit can impact their future. Additionally, NHS can tap into Wagner students’ knowledge and skills as they volunteer at our offices.”

The outcomes for the course can be viewed from the same three perspectives cited above from the previous year. However, two additional actual students’ deliverables were added: all students were exposed to the lectures on credit and housing issues and many students received the Homebuyer’s Certificate which entitles them to services offered from both NHS and the government. Additionally, a few students manned the court house to respond to the community’s need with questions about low credit and mortgage defaults issues. Once again, the resulting civic realty work during the spring 2009 semester received even more public attention than the previous year. The class was interviewed by Monica Brown of NY1 (Students, 2009); where we were again cited in The Staten Island Advance (Experts to Offer Advice on Foreclosures, 2009); we hosted the first Foreclosure Prevention Seminar; 80 people in attendance; and we organized an end-of-year reception where students presented the results of their work to the real estate partners and members from our community organizations.

Additionally, the Instructor of this course was invited to attend the Neighborhood Housing Service’s annual Regional Interagency Committee (RIAC) Breakfast at the Marriott Marquis in NYC. With over 220 guests from not-for-profit organizations to major banks to governmental representatives, the guest speaker was Banking Superintendent Richard H. Neiman and a Wagner student from the Civic Realty course. The student was invited by NHS to present on how this experiential component of the course benefitted NHS, Wagner, and herself as a student. Mr. Mark Hogan of NHS introduced Maryann by saying:

“This past year NHS of Staten Island (NHSSI) and Wagner College formed a collaboration to ensure that students have the knowledge necessary to make better financial choices in the future NHSSI classes were included in the curriculum of Wagner College’s Real Estate Investment Class...A four set series of Home Buyer Education classes were made available to the students.” (Hogan, 2009)

The above quote with additional information about the student was included in the packet that was distributed to all participants at RIAC.

The resulting benefits of the collaborative efforts amongst Wagner College and our community partners can be seen in 5 major areas. First, this experience tremendously helped our business students put into practice what they were learning in the classroom, were able to witness the imperfections and incompleteness of the models and frameworks they were reading in their textbook, as well as to expand and deepen their knowledge of the housing market. As Thomas Ehrlich would echo, this course and the community engagement activities has definitely taught students “to make a difference in the civic life of our communities and develop the combination
of knowledge skills, values and motivation to make that difference” (Ehrlich, T., 2000). The unsolicited comments made by students evidenced by their reflective journal writing positively reflect their experiences in having a practical experiential component added to their course work. (Transcript of student journal comments without their names can be supplied upon request.)

Second, as outlined by Bringle & Hatcher (1996), Buddensick & Lo Re (2010), they posit that “service learning goes beyond furthering the understanding of course content and broadening the appreciation of the discipline; it enhances a sense of civic responsibility” (p. 101). This Civic Realty experience, as evidenced by the students’ reflective journals, instilled in the students not only a sense of civic responsibility and awareness, but also a deeper engagement of the civic/public issues surrounding the housing market in Staten Island.

Third, this Civic Realty course has extended the College’s connection into the community and strengthened its civic engagement mission, with not only our community partners, the SIBOR and the NHS, but also many independent real estate agencies on Staten Island, Brooklyn, and the New Jersey areas.

Fourth, Wagner College and the Civic Realty students have received much positive exposure in the media. Through the multiple public venues held, this has reinforced the links in the classroom, on the campus, and in the community and fostered campus environments where students, faculty, administrators, alumni and community members were actively engaged. (Project Pericles)

Lastly, this initiative has allowed the opportunity to develop interactive teaching practices as well as expand knowledge and research agenda.

3.2 Incubator Model
Business incubation can provide a bit of a “cache” to a College or University, another factor to attract faculty and students, and an invaluable network of resources. If properly managed, an incubator model could develop a whole network of professional contacts that can be called upon for various types of support and/or collaboration. It provides valuable links between teaching, research and the marketplace. Other fringe benefits include internal and external public relations value, an employer pool for students, a boost to the local economy and the subsequent reduction in the brain drain of students going to other states to gain employment. There is also opportunity for financial grants and academic research and development. (Sausner & Goral, 2002)

According to Don K. Gentry, Vice Provost for Engagement at Purdue, their incubator success is based on the ability to use the already existing campus resources, and the specific services they offer such as strategic planning, market analysis, introductions to investors, and business plan assistance. (Sausner & Goral, 2002)

According to Thomas Goodrow, Vice President of Economic Development and Business Development at Springfield Technical Community College in Massachusetts, “Student business incubators are going to be the new frontier (of education)”. He is also the founder of the National Association for Community College Entrepreneurship. However at a recent NACCE conference, organizers polled 450 attendees as to whether they had a student business incubator of any form, and only 15 did! (Provide real-life experiences with a student business incubator, 2009). Therefore, while the business incubator concept is not new, its application, execution and implementation is still in the early adoption stage.
Whereas the literature seems to indicate that business incubators are valuable to the student and institution, we find it curious that it has not grown to a more prominent position. We believe there is a unique niche in business incubators that can be filled especially by the small Liberal Arts Colleges that can have a profound and disproportionately favorable effect on the students in those colleges and the institutions that create them.

The initial marketing incubation project at Wagner College was designed as follows: Students in the Marketing Consumer Behavior class in the fall of 2010 were asked if they wanted to volunteer to participate in a marketing project with the Staten Island Zoo in lieu of a written final. The written take-home final exam represented 20% of their grade as stated on the syllabus. Almost 50% of the class initially showed an interest in this alternative, so the concept was pursued. Unfortunately, the project never came to fruition in that fall semester. However, as a byproduct of the interest of the Staten Island Zoo in utilizing our students for meaningful test marketing incubator, and the popularity of the idea with the students, we pursued other alternatives that had become available to us through our involvement with the Wagner Marketing Club.

We had been approached in previous semesters with requests for marketing club students to assist in promoting many events, such as sports teams, clubs or organizations on the Wagner campus. It just so happened that at the time we were trying to establish our marketing relationship and define the scope of work with the Staten Island Zoo as a potential “real world” client for the marketing incubator experiment, other options surfaced.

Option one came through a Wagner colleague, who had requested support for an acquaintance who was trying to establish a start-up marriage arbitration business. The entrepreneur is a certified marriage mediator, and an advocate in the movement called Anti-Family court. In essence, this entrepreneur is attempting to initiate a marriage mediation business (i.e., the public issue) and wanted the Wagner College students’ help to market the concept—help bring to light the issues surrounding the breakdown of a family. Six of the students in the Consumer Behavior class volunteered for this assignment, and we all met for an initial meeting with the entrepreneur to discuss the issues. The team ultimately came up with 3 specific tools: a draft advertising tool with the headline “don’t make your child choose a side;” a mailing list and a promotional letter trying to set up a speaking arrangement with relevant organizations on Staten Island; and a half page brochure that was designed primarily to be put on the windshields of cars in the Staten Island Mall just before Christmas.

Option two emerged through a Wagner graduate student who had previously graduated from Wagner with a concentration in marketing and had previously been a member of the Wagner marketing club. She was impressed by a non-profit organization named Spring House. This is an organization which provides interim housing and life building services to young unwed mothers and their children. With the intent to bring exposure to the safety and living issue of unwed mothers, this organization requested that our marketing students help to revamp their marketing presentation. Three students volunteered to participate in this assignment.

The marketing challenge as it related to the Spring House was to develop a promotional DVD that could be used for fund raising. This meant that we needed camera equipment and programming to turn a “shoot” into a final product. However, neither the Spring House nor the students who elected to join this incubator, while they were extremely creative, had the equipment or the editing expertise to complete the final deliverable. Fortunately, the camera recording equipment was available in the Wagner College IT department, and the Director of the department was willing and able to edit our shoot. The earlier detailed mention of college
collaborations reinforce our position that the incubator concept will provide a better educational experience if it has the support of the entire campus.

The educational challenge of the Spring House project was that, in contrast to the mediation project where all meetings took place on campus at an agreed upon time and place, we had to physically go to the location to understand Spring House and shoot the video. That meant we needed to accommodate the students’ schedules, and coordinate those limited schedules with the scheduled activities we wanted to shoot at Spring House. In addition, since Spring House is located approximately 1 hour and 15 minutes away from Wagner College, we had to consider transportation to and from the site. While the primary purpose of our marketing involvement was clear, the logistics and coordination played a role in the educational experience. The team ultimately did two separate shoots on site, and after edits, a complete DVD (along with 10 additional copies) were delivery to Spring House.

Future development of the incubator program could include these five phases:

1. Include project based learning, experiential learning, civic engagement across the marketing curriculum.
2. A marketing incubator as a special topics marketing course, where students work on incubation projects during that semester.
3. Year round marketing incubator as a capstone option - a two semester class. This would resolve the issue of being limited by the semester. If this capstone course is offered as an option every year, and the requirement is to take two classes in a row (i.e. fall/spring, spring/summer, summer/ fall) there would be a year round workforce that would be available to the client and the professor.
4. Full year round incubator services. Once the year round capstone course for the marketing concentration is established, there is no reason the same idea cannot be applied to other business disciplines such as accounting and finance. Sufficient technological advances have occurred that would allow transparent accounting and/or finance projects from a distance.
5. Expansion to full service incubator.

4. CONCLUSION

Datar, et.al., (2010) lend credence to critics who "question whether business schools do a good job of alerting students to the imperfections and incompleteness of the models and frameworks they teach." In agreement with these authors, we proposed two broad engaged learning models: a civic engagement course with an experiential component tied to course content and exploring the issue of housing, described herein as Civic Realty; and an incubator system, where the students from a marketing course served as consultants to provide support and selected services to startup and a not-for-profit organization revolving around two issues of public concern—issues on the breakdown of a marriage and issues on interim housing and life building services to young unwed mothers and their children—respectively.

These engaged learning modalities served to: put into practice what the students were learning in the classroom; able to witness the imperfections and incompleteness of the models and frameworks the read in their textbooks; deepen student engagement of civic/public issues; extend the College’s connection to the community and strengthen its civic engagement mission; students’ positive exposure in the media reinforcing critical, civic and public speaking skills; through multiple public venues fostered campus environments where students, faculty, administrators, alumni and community members were actively engaged; and allowed the
opportunity to develop interactive teaching practices as well as expand knowledge and research agenda of the instructors teaching these courses.
While there is still much to be done in addressing the concerns of society expressed in the media of what we are teaching our college students, this paper illustrates two diverse methodologies to respond to higher-education’s imperative of instilling civic responsibility and their overall critique that book knowledge fails to exposure students to the complexities of life.

REFERENCES
Appendix B

Application for Wagner College Research Fellowship and Grant

September 30, 2011
Application for research fellowship and grant being offered by the Center for Teaching Learning and Research at Wagner College

Frank DeSimone
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Email: frank.desimone@wagner.edu

I am currently conducting research with my Consumer Behavior class (Mk301). We have formed 5 mock advertising agencies comprised of students from the class. I will act as the account manager of the agency. We will be working with 5 diversified organizations as follows:
USA College Sports (sports marketing)
A Taste of Honey (a catering company)
Snug Harbor (primarily targeted at marketing the Wagner theatre productions there)
SI Green initiative (environmental marketing)
Staten Island Chamber of Commerce (service marketing)
The hypothesis is that by “learning by doing”, the students will improve their critical thinking skills. The students will develop a scope of work with the clients, and then deliver specific marketing and/or promotional deliverables. I have conducted similar research in two previous marketing classes here at Wagner.

Methodology
Students have been offered the opportunity to participate in the above teams in lieu of a six page written final which represents 20% of their final grade. Because there will be time dedicated outside the classroom, those choosing to join the teams are also being offered the possibility of 10 extra credit points. Of the 35 students registered in the class, 18 have chosen to join one of the teams, and 17 have chosen to take the traditional final.
On Tuesday, September 20, I gave all the students in the class a short survey and two critical thinking prompts for them to answer in 20 minutes (Survey and prompt available upon request). I have had the research scored by two independent Business Department GA’s according to the Teagle grant scoring rubric commonly used by the Business Department. (One of the GA’s has completed the scoring as of today, and that scoring grid is available upon request)
At the end of the semester, I will provide a similar research document for all the students to complete, and we will be able to determine if the critical thinking skills of the entire class have improved, but also to ascertain if there is a significant difference between the scores of those that participated in one of the teams, and those that did not.
I have also met with Professor John Buzza of Monmouth University, and he is also providing a critical thinking prompt to his students in the entrepreneurial class at Monmouth this week and at the end of his class. This will give us the opportunity to do comparative research also.
It is my intention to write an article for publication about this study, particularly if we can do a comparative study with Monmouth University.
I am attending an IABE conference on October 16, 2011, representing an article co-authored by Dr. LoRe and Prof. Buddensick of the Business Department titled “Engaged Learning Models
for Civic Engagement”, and this study (and the two previous studies) will be integrated into the presentation.
This research study will also contribute to research required for my dissertation. My dissertation topic has been approved by the International School of Management, and is titled “Proposed Innovation in Undergraduate Education: the Marketing Business Incubator. (The research proposal is also available upon request)
I intend to use the research grant to fund the mathematical research of all the data points and/or to edit and organize an article for publication
If you need any additional information, please let me know.
Thanks for your consideration, and best regards,
Frank DeSimone
Assistant Professor
Appendix C

Experiential Learning: Improving the Efficacy of an Undergraduate Business Degree

Experiential Learning: Improving
The Efficacy Of An Undergraduate
Business Degree
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ABSTRACT

This article deals with a subject that is extremely important to the success of future graduates of any college or University – specifically Critical Thinking and Decision Making. Our article explains the research results and observations of critical thinking research conducted at two different colleges in the fall semester of 2011. The research prompts were used at two different colleges (Wagner College and Monmouth University) with different student profiles during the same semester. The purpose of the research was to test how critical thinking skills were affected by two different experiential programs and how “Ex-Ed” is a critical part of a student’s total education.

Experimental Education (Ex-Ed) is a very hot topic among academics these days and our research at Wagner College involved testing the improvement in critical thinking skills in a “marketing incubator” system during a Consumer Behavior class with 34 registered students in the fall semester in 2011. In this case, some of the students participated in the marketing incubator (18), while some did not (16), essentially providing a control groups for comparison. At Monmouth University, the research was testing the improvement in critical thinking skills in two entrepreneurial studies classes with a total of 67 students. Qualitative observations are included as the research is conducted, and suggestions for future related research are proposed. Our feeling is that to form a definitive conclusion, the subsequent research needs to be done in the area of both decision making and the creation of a value proposition.
**INTRODUCTION/LITERATURE REVIEW**

Critical thinking (CT) has been defined as “the use of those cognitive skills or strategies that increase the probability of a desirable outcome” (D. Halpern, 1998, p. 450). According to Roland Case, “every curriculum document mentions critical thinking, and there is universal agreement about the need to make thoughtful judgments in virtually every aspect of our lives—from who and what to believe to how and when to act” (2005, p. 45).

Declining American test scores are directly related to the lack of critical thinking skills being learned in our Colleges and Universities. “The U.S. Department of Education has linked the decades-long decline in education outcomes to students’ poor Critical Thinking Skills” (Reid, 2010, p. 7). Winn emphasizes the failures in teaching critical thinking (2004) and Case (2005, p. 45) stated that “he is disheartened by the failure to teach Critical Thinking”. Willingham (2007, p. 8) goes a step further by asking, “Can critical thinking be taught?” Rhetorically, he answers, “Not really.”

Several different sources of constructivist learning such as Problem Based Learning, Case Study Analysis, Internships and service experiential learning have been tried in order to improve the critical thinking of students.

For example, Carini, Kuh and Klein (2006) measured student engagement in 14 four year colleges and universities measuring many project based learning techniques. Zigler (1994) presented a single universal, unverified case study in which new administrators were taught skills based on experiential learning. McCormick (1993) claimed increases in Critical Thinking based on the experiences of interns. In a report from the Office of Educational Research and improvement, Stein (2000) claims that critical reflection combines experiential learning with technical learning to create new constructs of knowledge, new behaviors, or new insights, leading to Critical Thinking. Jakubowski (2003) claims that a field trip to Cuba encouraged Critical thinking. Abrami et al. (2008) did a study measuring a whole host of CT studies in order to identify a pattern of success.
Despite the number of studies, there are still mixed results as it relates to linkage to students’ Critical Thinking, measurement methods.

This study evolved because Professor DeSimone of Wagner College and Professor Buzza at Monmouth University share the belief that experiential learning is the best way to improve the efficacy of undergraduate business education by improving critical thinking skills for this generation of students. However, they both independently developed significantly different experiential systems to apply this experiential learning component in their specific classes and institutions. This research study attempts to use a similar CLA Critical Thinking essay prompt to measure the linkage between the two.

Professor DeSimone is applying what he refers to as a “marketing incubator” program where students registered for core marketing classes are given an option to either participate in the “marketing incubator” or to not participate in the marketing incubator, and take the class with a traditional final. In the marketing incubator, the class is given an opportunity to interact with a “real world” company and aid them in some portion of their marketing function. The assignment includes the negotiation of a “scope of work” or project definition as to what the student team will have to complete by the end of the semester. The student team then acts as a “mock advertising agency” with Professor DeSimone as the account executive. The business person in the real world company identified real world marketing challenges, and acts as the client to the advertising agency. In this education model, the students have exactly the same class time, syllabus, and assignments except that of their final exam. The participating group (experimental group) work throughout the semester with the assigned “real world” client. The control group takes a traditional take home written final exam. The participating students are graded based on the quality and creativity of their marketing deliverables as compared to their agreed scope of work, and will make an informal presentation comparing the original “scope of work” to what they achieved and delivered for the client. The control group will also make an informal presentation at the end of the class, selecting one of the topics from their take-home final to present to the class in detail.

Some examples of specific deliverables from the marketing incubator teams in fall 2011 are event planning, research, the construction of a social media plan, and creative planning for print advertising.

Professor Buzza is the Director of the Center for Entrepreneurial Studies at Monmouth
University and is applying his experiential component to two classes entitled Entrepreneurship and Small Business Management in the fall 2011 semester. In this form of experiential learning, the students all participate in the start-up of an entrepreneurial venture, encompassing all phases of the operation including legal, finance, marketing, and management. The students create the company with the understanding that they will be able to “buy” the company back at the end of the semester for $1.00. In this experiential format, the students are broken into teams, and assigned specific tasks and timelines in order to accomplish the launch within the semester. In this case, Prof. Buzza plays the role of CEO, and guides, teaches and aides all of the students in their assigned tasks throughout the semester. At the end of the semester, the students do a formal presentation describing the new company and the process they went through to develop the company.

In the fall 2011 semester, the students and Prof. Buzza created and presented a GPS Tracking company.

Starting in the fall of 2011, Professor DeSimone and Professor Buzza designed a joint research study to test the impact of their program on the critical thinking skills of their students. The purpose of the research was to measure if students’ critical thinking skills were being affected by the two different experiential components embedded separately in their programs. The co-authors also want to begin the process of qualitatively assessing which of the experiential components mix and match to provide the most efficacious student experience.

This article analyses the research results and observations of critical thinking research conducted at Wagner College and Monmouth University in the fall semester of 2011.

Study Design

The same Critical thinking research prompts were used at two different colleges with two different experiential programs with different student profiles during the fall 2011 semester.

The research tested the improvement in critical thinking skills in the “marketing incubator” experiential method described above during a Consumer Behavior class with 34 registered students. In this experimental design, some of the students elected to participate in the
marketing incubator (18), while some did not (16); in effect, providing an experimental group and a control group for direct comparison between the participants and the non-participants in the experiential component. At Monmouth University, the research was testing the improvement in critical thinking skills in two entrepreneurial studies classes with a total of 67 registered students. In both cases, the students were given a series of critical thinking prompts near the beginning of the semester and a series of critical thinking prompts near the end of the semester. The critical thinking prompts were then scored by the same two Wagner College Graduate Assistants (GA’s), the scores of the two GA’s were averaged to reduce bias, and the average mean prompt scores were tabulated. Then the beginning-of-the-semester prompt scores were compared to the end-of-semester prompts scores for each school, and a one and two-tailed t test was run assuming unequal variances to test for statistical significance.

**HYPOTHESIS**

The author designed the original research to measure the growth in critical thinking scores in courses at Wagner College in Staten Island, New York, designed to embed an experiential component (the marketing incubator) into the course structure.

1. Those students participating in the study (experimental group) will show statistically significant improvement in average prompt scores as compared with those students that did not participate (control group) within a confidence level of 95%.

The author applied the same type of research prompts to measure the growth in critical thinking scores in Entrepreneurial studies courses at Monmouth University using an entrepreneurial start-up as its experiential component.

2. The students taking this course will show statistically significant improvement in average prompt scores from the beginning of the semester to the end of the semester within a confidence level of 95%.
Quantitative Research Analysis - Student Profile

Thirty four students registered for MK 301, Consumer Behavior for the fall 2011. Below are the demographics of this class:

- It is a marketing core course where majority of the students have a concentration or minor in marketing.
- Thirty-four students were registered.
- Twenty-nine students were seniors and five were juniors.
- Twenty-two were business administration majors, ten were Arts Administration majors, one was a Theatre Major and one was a Psychology major.
- Twenty-four students were female and ten were male.
- Approximately 75% of Wagner students live on campus; 25% are commuters.

Procedure

On the first day of class the instructor of the class covered the course syllabus. As stated on the course syllabus, the students were given an option to participate in the marketing incubator project as their final requirement, or to do a six-page final written exam. The written exam assignment on the syllabus was:

“To choose three topics from the text of interest to them, and expand upon that topic by doing additional research, applying that theory to their experience, or otherwise dispute or expand upon the theory”. They would also have to select one of the topics they chose and present that topic to the class.

For both groups, the final was worth 20% of their final grade. Those that chose to participate in the incubator were also told they could earn extra credit of 10% of their final grade if they were to exceed the “scope of work” agreed with the client. This was also meant to compensate the students for additional time outside of class time for group meetings with the client, and separate group meetings to coordinate their workload and collaborate on the “scope of work”. To avoid any bias, students that chose not to participate in the marketing incubator were also able to obtain extra credit through various traditional assignments such as case study
analysis or an extra paper. Of the total of 34 students registered in the class, 18 students chose to participate in the marketing incubator project, and 16 chose not to participate in the marketing incubator project. Below is table 1 which lists the 5 type of incubator clients and the number of students selecting each one in the fall 2011 consumer behavior class.

Table 1: Students by Incubator Client Type

<table>
<thead>
<tr>
<th>Type of Incubator Client</th>
<th>Number of students in the team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Marketing</td>
<td>4</td>
</tr>
<tr>
<td>A Catering Company</td>
<td>4</td>
</tr>
<tr>
<td>Government/College Partnership</td>
<td>4</td>
</tr>
<tr>
<td>Environmental Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Service Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Methodology

All students were given the survey shown in Appendix A on September 20. The Instructor of the course authored the survey including two critical thinking prompts. In an effort to make the prompts general enough to foster critical thinking, the Instructor borrowed quotations from the article Advertising: The Poetry of Becoming by Theodore Levitt (1993). This article was not part of the course work. This prompt was reviewed by Dr. Lo Re, the Chair of the Department of Business Administration at Wagner College and subsequently again by the Center for Teaching, Learning and Research at Wagner College chaired by Katia Gonzalez.

The students were given exactly 20 minutes to complete the survey. They were also given the typical blue booklets to write their answers. They were told not to put their names on the survey and to do their best according to the instructions on the survey itself.

Of the 34 students registered in the class, 32 were present on September 20 to take the survey and answer the essay prompts. The survey was given at the beginning of the class after attendance was taken. After the students completed the 20 minute survey and essay prompts, the booklets including the prompt responses were collected and given to the two business
department graduate assistants (GA’s). The graduate assistants were given a short background about the study, and a copy of the survey and essay prompts and told to assign the anonymous booklets a number from one to 32. Therefore, each of the two graduate assistants was independently scoring booklet number 1 and then number two and so on. Consequently the score for number one for each GA’s was for the same booklet. This later proved to be useful when we needed to reconcile a discrepancy in the scoring of N/A (not applicable) if it occurred. The GA’s are Graduate Business Administration students of Wagner College and for the fall 2011 semester are both accounting majors. The GA’s were then given the Teagle scoring grid titled “SOLO Taxonomy for Assessing Level of Critical Thinking”. (Appendix B) More details can be found on multiple websites. One such website is: http://www4.ncsu.edu/~damcconn/ct2_background.html (McConnell, n.d.). This method of scoring was chosen because this is the standard Critical Thinking scoring technique used at Wagner College to score overall College Collegiate Learning Assessment (CLA) exam results for the college as a whole. The Instructor of the course, Prof. DeSimone, is modestly acquainted with this method because of his participation in the Freshman, Intermediate and Senior Learning communities at Wagner College. He moderated a number of CLA exams, and received research analysis and results as part of the Intermediate and Senior Learning Committees. He also attended a presentation on the topic by an expert in the field at Wagner College, Dr. Donald Sterns, on February 10, 2011 about the methodology.

The other reasons why this particular measurement tool was chosen are:

1. These (CT) rubrics are widely used amongst civic engagement practitioners and particularly by Wagner College
2. Since the research prompts can be designed for a particular class, it is hopefully more motivational for the student to apply critical thinking
3. The essay prompt can be made more specific to the subject matter
4. There is no cost or budgetary concerns
5. It is easier to scale to other classes and other institutions
6. The CLA is an accredited assessment organization
7. It is the measurement tool of choice for Academically Adrift (Arum & Roksa, 2011), that was an inspiration for much of the author’s research into designing this research.

The booklets were then scored, and the scores were compiled on an excel spreadsheet by the GA’s and then the scores were averaged in order to reduce scoring bias. A summary of the scores are seen in Table 2 below:
Table 2: Summary of Survey Scores

<table>
<thead>
<tr>
<th>Consumer Behavior t-tests - Two Samples Assuming Unequal Variances</th>
<th>All Students (n=32)</th>
<th>Beginning of the Semester September 20, 2011</th>
<th>End of the Semester December 8, 2011</th>
<th>Improvement</th>
<th>One-tail</th>
<th>Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td>t-test</td>
<td>t-test</td>
</tr>
<tr>
<td>Prompt 1/P2</td>
<td>32</td>
<td>3.83</td>
<td>32</td>
<td>3.91</td>
<td>2.04%</td>
<td>0.3934</td>
</tr>
<tr>
<td>Prompt 2/P1</td>
<td>28</td>
<td>3.20</td>
<td>31</td>
<td>3.79</td>
<td>18.58%</td>
<td>0.0490</td>
</tr>
<tr>
<td>Average combined</td>
<td>3.52</td>
<td>3.86</td>
<td>9.80%</td>
<td>0.1047</td>
<td>0.2094</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer Behavior t-tests - Two Samples Assuming Unequal Variances</th>
<th>Participating (n=18)</th>
<th>Beginning of the Semester September 20, 2011</th>
<th>End of the Semester December 8, 2011</th>
<th>Improvement</th>
<th>One-tail</th>
<th>Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td>t-test</td>
<td>t-test</td>
</tr>
<tr>
<td>Prompt 1/P2</td>
<td>18</td>
<td>3.89</td>
<td>17</td>
<td>4.26</td>
<td>9.66%</td>
<td>0.1918</td>
</tr>
<tr>
<td>Prompt 2/P1</td>
<td>15</td>
<td>3.47</td>
<td>16</td>
<td>4.09</td>
<td>18.09%</td>
<td>0.0561</td>
</tr>
<tr>
<td>Average combined</td>
<td>3.68</td>
<td>4.07</td>
<td>10.689%</td>
<td>0.1354</td>
<td>0.2707</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer Behavior t-tests - Two Samples Assuming Unequal Variances</th>
<th>Non-Participating (n=16)</th>
<th>Beginning of the Semester September 20, 2011</th>
<th>End of the Semester December 8, 2011</th>
<th>Improvement</th>
<th>One-tail</th>
<th>Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td>t-test</td>
<td>t-test</td>
</tr>
<tr>
<td>Prompt 1/P2</td>
<td>14</td>
<td>3.75</td>
<td>15</td>
<td>3.50</td>
<td>-6.67%</td>
<td></td>
</tr>
<tr>
<td>Prompt 2/P1</td>
<td>13</td>
<td>2.88</td>
<td>15</td>
<td>3.47</td>
<td>20.18%</td>
<td></td>
</tr>
<tr>
<td>Average combined</td>
<td>3.34</td>
<td>3.48</td>
<td>4.31%</td>
<td>0.3772</td>
<td>0.7548</td>
<td></td>
</tr>
</tbody>
</table>

Analysis of Findings
For the beginning-of-the-semester research, Prompt 1 scored an average mean of 3.83 out of a maximum of 7.0 with a variance of 1.01 with 32 observations. Prompt 2 scored an average of 3.20 out of a maximum of 7.0 with a variance of 2.10 with 28 observations. The difference in observations is attributable to those that did not complete an answer to a prompt. The GA’s were instructed to disregard any answer that was not complete and assign an N/A. In the case where an answer was judged to be incomplete by both GA’s independently, it was scored as N/A and not averaged into the mean score. If one GA did provide a score, and another did not, then a third GA would review both booklets and would make the decision to score the answer or not.

This same methodology was repeated again with the same GA’s as scorers with the same instructions by giving the survey/prompts (Appendix C) to the students of the consumer behavior class on December 8, 2011.

The scores were again put on an excel spreadsheet by the GA’s and then the scores were averaged in order to reduce scoring bias. The end-of-semester average of Prompt 1 scored an average mean of 3.79 out of a maximum of 7.0 with a variance of 1.10 with 31 observations. The end-of-semester Prompt 2 scored an average of 3.91 out of 7.0 with a variance of 1.64 with 32 observations. Again, the difference in the number of observations was due to the application of N/A to certain responses.

As part of the end-of-semester research, the prompts were reversed. In other words, the prompt 1 survey in the beginning of the semester is actually prompt 2 at the end of the semester and the Prompt 2 survey in the beginning of the semester is the same as Prompt 1 at the end of the semester.

If we were to change the prompts, we would not be able to ascertain if the average scores were different because the prompts were easier or harder to critically review. The rationale for this decision is that by inverting the prompts, we would eliminate this possibility.

The beginning-of-the-semester prompt 1 had an average mean score of 3.83, while the end of the semester score on Prompt 2 was 3.91, or a 2.04% improvement in the end-of-semester critical thinking scores as compared to the beginning of the semester. The two-tailed t-test results showed 0.79 significance, or an insignificant result for this prompt comparison.

The beginning-of-the-semester prompt 2 had an average mean score of 3.20, while the
end of the semester prompt 1 had an average mean score 3.79, or a 18.58% improvement of the end of the semester mean scores over the beginning-of-the-semester scores. The two-tailed t-test showed a .08 significance, or a significant result within 8% variance for this critical thinking prompt score.

The average of the mean of both prompt 1 and 2 in the beginning of the semester was 3.52, while the average of the means of the end of the semester scores was 3.86, or a 9.8% combined improvement in the average scores at the end of the semester mean prompt scores as compared with the beginning-of-the-semester mean prompt scores. The variance of the scores compared to the mean in the beginning of the semester was 1.18 and the variance of the scores compared to the mean at the end of the semester was 1.17. While the overall improvement in the student average mean prompt scores was 9.8%, the two-tailed t-test results indicated a 0.21 significance, or, a statistically insignificant result.

As it relates to the important question of the difference in the scores of those that did participate (experimental group) in the marketing incubator program as compared to those that did not (control group), we separated the responses accordingly.

The first observation as it relates to those students that participated in the incubator project as opposed to those that did not, is that the beginning scores are higher for those that chose to participate in the marketing incubator project by a considerable margin. For example, the average beginning combined score for those that participated was 3.68 as compared with an average beginning prompt score of 3.34 for those that did not, or a mean score that was 10% higher to begin with. Considering they are coming from the same class in the same school with a very similar demographic and registering with the same professor, the authors believe that is a considerable difference to start with and deserves future study. This may imply something about the critical thinking skills of those students who are more interested or willing to participate in an experiential “real world “exercise in the first place. More will be discussed about this result in the observation and analysis section of this paper.

For those that did participate in the marketing incubator the beginning-of-the-semester prompt 1 had an average mean score of 3.89 while the end of the semester score on Prompt 2 was 4.26, or a 9.66% improvement in the end-of-semester critical thinking scores as compared to the beginning of the semester. The two-tailed t-test results indicated a 0.38 significance, or an insignificant result for this prompt comparison.
The beginning-of-the-semester prompt 2 had an average mean score of 3.47, while the end of the semester prompt 1 had an average mean score 4.09, or a 18.09% improvement of the end of the semester scores over the beginning-of-the-semester scores. The two-tailed t-test showed a 0.11 significance, or a significant result with an 89% confidence level.

The average of the means of both prompt 1 and 2 in the beginning of the semester was 3.68, while the average of the means of the end of the semester scores was 4.07, or a 10.68% improvement in the average prompt scores at the end of the semester scores as compared with the beginning-of-the-semester prompt scores. The variance of the scores compared to the mean in the beginning of the semester was 1.52 as compared with 0.65 at the end of the semester. The two-tailed t-test results indicated a 0.27 significance, or an insignificant result.

For those that did not participate in the incubator, the beginning-of-the-semester prompt 1 had an average mean score of 3.75, while the end of the semester scores on prompt 2 were 3.5, or a 6.67% reduction in the end-of-semester critical thinking scores as compared to the beginning of the semester. The two-tailed t-test results indicated a 0.59 significance, or an insignificant result for this prompt comparison.

The beginning-of-the-semester prompt 2 score had an average mean score of 2.88 while the end of the semester prompt 1 score had an average mean score 3.47, or a 20.18% improvement of the end of the semester scores over the beginning-of-the-semester scores. While the end-of-semester scores indicated a 20.81% improvement, the two-tailed t-test indicated a 0.30 significance, or a statistically insignificant result.

The average of the means of both prompt 1 and 2 in the beginning of the semester was 3.34, while the average of the means of the end of the semester scores was 3.48, or a 4.31% improvement in the average scores at the end of the semester scores as compared with the beginning-of-the-semester scores. The variance of the scores compared to the mean in the beginning of the semester was 1.68 and the variance of the scores as compared to the mean in the end of the semester was 1.32. The two-tailed t-test results indicated a 0.75 significance, or an insignificant result.

Specific Semester Observations/Explanations - Wagner College
The compelling part of the Wagner College research derives from the comparison of those that participated in the marketing incubator, compared to those that did not.

When comparing the scores of the end-of-semester prompts of those that did participate in the incubator with those that did not, the findings become statistically significant according to the two-tailed t-test within 11% and a one-tailed t-test within 6%.

Those that did not participate in the marketing incubator scored an average mean of 3.47 on Prompt 1 at the end of the semester. Those that did participate in the marketing incubator at the end of the semester scored an average mean of 4.09 on prompt 1. This represents an 18.09% better score and a two-tailed significance within 10%.

Those that did not participate in the marketing incubator scored an average mean of 3.50 on Prompt 2 at the end of the semester. Those that did participate in the marketing incubator at the end of the semester scored an average mean of 4.26. This represents a 21.17% better score despite an insignificant two-tailed significance result.

Those that did not participate in the marketing incubator scored a total average mean of 3.48 on both prompts at the end of the semester. Those that did participate in the marketing incubator at the end of the semester scored a total average mean of 4.07 on both prompts. This represents a 16.95% better total average score for those that participated in the marketing incubator than those that did not with two-tailed t test significance within 11% and one-tailed t test significance within 6%.

While the research consistently shows an impressive gain with all students in critical thinking prompt scores from the beginning of the semester to the end of the semester, the most statistically significant scores are as a result of the scores at the end of the semester between those that participated in the marketing incubator and those that did not. Since all other components of the course are identical this seems to indicate that the participation with the marketing incubator program leads to an improvement in critical thinking with the students over the course of one semester.

It should be noted again that the differences in observations in some of the research is attributable to the fact that some students either did not answer prompt 2 or did not answer sufficiently to merit a score. Whenever this happened, the GA’s were told to mark the score with
a N/A. If both GA’s scored a particular booklet N/A, then it was left N/A and not included in the averages. If one GA scored an N/A and another did not, a third GA (Alayna) was asked to review that booklet and make a determination whether the booklet should be scored or left as an N/A. Discussion with the GA’s and the students seem to indicate that some of them ran out of time answering the prompts, and others became “less motivated” to write as time went on. It should also be noted that the students seemed to score better on the first prompt of the research. In this study, 23 students scored better on the first prompt than the second prompt, 4 scored the same and 5 students scored better on the second prompt than the first. This should be noted as one of the weaknesses of the research study.

MONMOUTH UNIVERSITY ENTREPRENEUR PROGRAM

Quantitative Research Analysis

Sixty-seven (67) students in both our Entrepreneurship (39) and Small Business Management (28) Class took part in the study. On the first day of class, Prof. Buzza went over the syllabus as he normally does. Early in the semester, the students were told they would all have to participate in a research study Monmouth University was conducting in conjunction with Wagner College to ascertain if their critical thinking skills improved as a byproduct of taking the course. The format of the course is to garner ideas from the students to start a business, one using “real money” that comes from Monmouth University by way of a grant, and to make that business come to fruition by the end of the semester. The students are told they will then be given an opportunity to “buy back” the company for $1 to continue to launch the company they started.

Comparison of the Studies

The two studies represent two different styles of embedding an experiential component into the curriculum as a way to improve undergraduate business student critical thinking skills.

In the Monmouth University Entrepreneurial Studies program, all students participate in the experiential exercise of creating and starting up a new company. Therefore, there is no control group as there is in the marketing incubator experiential component at Wagner College.
All of the students are participants in developing the product launch plan and the main part of their grade is the performance of each member of each team relative to the tasks assigned to them to achieve the entrepreneurial start-up. In the marketing incubator approach, the course is a traditional consumer behavior course with the exception of the marketing incubator, which is worth 20% of the grade. Professor Buzza acts as CEO of the new company and provides his experience and support to each individual group and to the entire class to meet deadlines and accomplish their tasks. All students participate in the selection of the product or service they will launch, and the final decision is mutually agreed by the students in the class and Prof. Buzza. In the case of the marketing incubator, Prof. DeSimone interviews a number of prospective potential marketing incubator clients, and the class chooses a company in an area of interest that appeals to them, or alternatively chose to not participate at all and take the traditional final exam. Prof. DeSimone most closely acts as the account executive to each of the marketing incubator teams and their clients. The student demographic was different in that the entrepreneurial class at Monmouth University. The class contained a mixture of business majors performing all of the business functions including finance, accounting marketing, business law, and so on. while the consumer behavior class was attended primarily by marketing majors and minors, and arts administration students. Monmouth University program had two classes with 67 students in total participating in the experiential component while the consumer behavior class was only one class and had 18 students participating in the marketing incubator experiential component. The Monmouth University students were given three Critical Thinking essay prompts while the Wagner College students were given a survey with three questions and 2 Critical Thinking essay prompts. Both were given exactly 20 minutes to complete their respective prompts. Both groups did a presentation at the end of the semester to reveal what they had accomplished.

Monmouth Student Profile

Sixty-seven students registered for Entrepreneurial Studies in the fall 2011. Below are the demographics of this class:

- It is a general business course where the majority of the students have a concentration in business. The majority of the class was management majors (77%), followed by marketing majors (21%) and accounting (3%). There was also one science major, one political science major, and one music major.
- Thirty-four students were registered in Entrepreneurial studies and in small business
- Fifty-one students were seniors and 16 were juniors.
- Thirty-three students were female and 34 were male.
- Approximately 72% of Monmouth students live on campus; 28% are commuters.
Research Methodology

All students were given the prompts (Appendix D) on Wednesday, October 12, 2011. Prof. DeSimone authored the survey including three critical thinking prompts. In an effort to make the prompts general enough to foster critical thinking, he borrowed general concepts from the introductory section of the textbook entitled Strategic Marketing (Cravens & Piercy, 2009).

The students were given exactly 20 minutes to complete the survey. Most of them were given the typical blue booklets to write in; while some completed the survey using lined white note pad paper. They were told not to put their names on the survey and to do their best according to the instructions on the survey itself.

Of the 67 students registered in the class, all 67 were present on Wednesday, October 12, 2011 to write their response to the three prompts. The survey was given at the beginning of the class after attendance was taken. After the students completed the 20 minute survey, the booklets including the prompt responses were collected by Prof. Buzza. The prompt responses were then given to Prof. DeSimone to be scored by the same two Graduate Assistants that were scoring his Wagner College Mk 301 research prompts.

The scoring procedure was identical to that used for the Wagner Consumer Behavior class. The booklets were then scored by the Wagner GA’s, and the scores were compiled on an excel spreadsheet by Noreen and Justin and then the scores were averaged in order to reduce scoring bias.

This same methodology was repeated again with the same GA’s as scorers with the same instructions by giving the essay prompts to the Monmouth students on December 7th as represented in Appendix E. The booklets were then scored and the scores were compiled on an Excel spreadsheet by the GA’s and then averaged in order to reduce scoring bias. A summary of the scores are seen in Table 3.

The beginning-of-the-semester scores for Prompt 1 were scored an average mean of 2.90 with a variance of 1.23 with 67 observations. Prompt 2 scored an average of 2.72 with a variance of 0.85 with 66 observations. Prompt 3 scored an average of 2.44, with a variance of 1.23 with 64 observations.
The scores were again put on a spreadsheet by Noreen and Justin and then the scores were averaged in order to reduce scoring bias. The end-of-semester average of Prompt 1 scored an average mean of 3.01 with a variance of 2.05 with 44 observations. The end-of-semester Prompt 2 scored an average of 3.16 with a variance of 1.43 with 44 observations. The end-of-semester Prompt 3 scored an average of 2.39, with a variance of 1.29 with 33 observations.
Table 3: Analysis of Findings

<table>
<thead>
<tr>
<th></th>
<th>Beginning of the Semester</th>
<th>End of the Semester</th>
<th>Improvement</th>
<th>One-tail</th>
<th>Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td># Observations</td>
<td>Mean Prompt Score</td>
<td>t-test</td>
</tr>
<tr>
<td>All Students</td>
<td>67</td>
<td>2.90</td>
<td>33</td>
<td>239</td>
<td>-17.32%</td>
</tr>
<tr>
<td>Prompt 1/P2</td>
<td>66</td>
<td>2.72</td>
<td>44</td>
<td>3.16</td>
<td>16.16%</td>
</tr>
<tr>
<td>Prompt 2/P1</td>
<td>64</td>
<td>2.44</td>
<td>44</td>
<td>3.01</td>
<td>23.54%</td>
</tr>
<tr>
<td>Average combined</td>
<td>64</td>
<td>2.74</td>
<td>44</td>
<td>2.94</td>
<td>7.39%</td>
</tr>
</tbody>
</table>

As part of the end-of-semester research, the prompts were reversed. In other words, the wording of prompt 1 in the beginning of the semester is actually the same wording as prompt 3 in the end of the semester survey and the wording of prompt 3 in the beginning-of-the-semester survey is the same wording as prompt 1 in the end of the semester survey. Prompt 2 is identical in both the beginning of the semester and at the end of the semester. The rational for this decision is that by changing the prompts, the research would be subject to the criticism that the beginning-of-the-semester prompts were either easier or harder than the end of the semester prompts. As will be discussed later in more detail under observations, the growth in the scores of beginning prompt 1 to ending prompt 3 indicated a reduction in the score of 17.32%, the comparisons of prompt 2 (which were identical) indicated a growth of 16.16% and the comparison of beginning prompt 3 to ending prompt one indicated a 23.54% growth in average scores. This substantiates the findings in virtually all the previous research that the students seem to obtain higher mean scores on the earlier prompts.

The beginning-of-semester prompt 1 had an average mean score of 2.90, while the end of the semester score on Prompt 3 was 2.39, or a reduction of 17.32% in the end-of-semester critical thinking prompt scores as compared to the beginning of the semester. The two-tailed t-test results indicated a .0407 significance, or a significant result for this prompt comparison within a confidence level of 4%. This finding again confirms the pattern we observed that the students perform significantly better in the earlier prompts than the later prompts. One should also notice that the observations on prompt 3 declined from 44 in prompts 1 and 2 to 33 in prompt 3. This reflects the fact that the GA’s determined that 10 of the scores were insufficient to grade at all for prompt 3. Again observations from the GA’s were that many of the students
simply ran out of time.

The beginning-of-the-semester prompt 2 had an average mean score of 2.72, while the end of the semester prompt 2 score had an average mean score of 3.16, or a 16.16% improvement of the end of the semester mean prompt scores as compared to the beginning-of-the-semester mean prompt scores. The two-tailed t-test showed a .0423 positive significance, or a significant result within a 5% variance. It should be noted here that this improvement is reflected by the same prompt in the same order in the survey.

The beginning-of-the-semester prompt 3 had an average mean score of 2.44, while the end of the semester prompt 1 score had an average mean score of 3.01, or a 23.54% improvement of the end of the semester scores over the beginning-of-the-semester scores. The two-tailed t-test showed a .0222 significance, or a highly significant result within a 2% confidence.

The average of the mean of all three prompts in the beginning of the semester was 2.74, while the average of the means of the end of the semester scores was 2.94, or a 7.39% combined improvement in the average scores at the end of the semester as compared with the beginning-of-the-semester scores. The variance of the scores compared to the mean in the beginning of the semester was 0.77 and while the variance of the scores compared to the mean in the end of the semester was 1.23. While the overall improvement in the combined average student critical thinking prompt scores was an impressive 7.39% higher at the end of the semester as compared with the beginning of the semester, the two-tailed t-test results indicated a .3109 significance, or an insignificant statistical result.

**Specific Observations/Explanations- Monmouth University**

Two of the critical thinking prompt comparisons indicated a statistically significant result (with one comparison showing a 24% improvement within a 2% significance variance), while the negative drop in one prompt score made the overall result impressive with a 7.39% total improvement, but still not statistically insignificant within a 5% confidence according to the
two-tailed t test.

Again, the mean essay prompt scores of critical thinking improved from the beginning of the semester to the end of the semester at Monmouth University. Two of the prompt scores showed a statistically significant improvement from the beginning of the semester to the end of the semester, which calls into question the use of three prompts at Monmouth University and the 20 minute time limit. One also needs to consider that while the author wanted the critical thinking prompts to be vague enough for all business students to be able to write freely about, the initial design was specifically toward a marketing student. Almost 80% of the total students in the Monmouth classes were not marketing students.

Monmouth University had a shorter elapsed time between the Critical Thinking prompt essays (56 days) as opposed to the Wagner College elapsed time between the Critical Thinking prompt essays (78 days). Since the literature on the topic questions whether Critical Thinking can be taught at all (Willingham, 2007), it is quite challenging to assume it can be taught with measurement taking less than one full semester.

FUTURE RESEARCH

Professor Buzza and Professor DeSimone are continuing to conduct similar research in the spring 2012 with their respective classes. In addition, in the spring of 2012, Professor Nielsen of Wagner College is also conducting the same research in the same course number as Prof. DeSimone using the same essay prompts. She is adapting the marketing incubator experiential component so that three companies are being studied concurrently as opposed to over the entire semester. It will prove interesting to draw comparisons about the efficacy of the three different programs involving approximately 100 students in the same semester.

After the 2012 semester research is complete, a number of the research issues need to be revisited.

One is the effectiveness of the prompts themselves. If they are redesigned, how would the researchers test for comparability? Whether the prompts are changed or not, should the students be given more than 20 minutes to complete the survey. Should there be 2 prompts or 3 prompts?
While the improvement in the average test scores are impressive in both studies, can we expect statistical significance in critical thinking for students within an elapsed timeframe of 78 days in one case (Wagner College) and 56 days (Monmouth University) in another? Reid (2010) shows research that has proven to do so with distance learning during the course of a semester, but also cites many studies that have not proven effective in improving critical thinking skills in the course of one semester.

CONCLUSION

The research is encouraging in that it indicates an improvement in Critical Thinking scores from the beginning of the semester to the end of the semester for both the Wagner College and the Monmouth University studies, but without statistical significance with a 5% confidence level according to a two-tailed t test assuming unequal variances. In the case of Monmouth University, since all the students participate in the program, there has been no control group to assess the potential improvement in critical thinking skills of the typical Monmouth University student. However, in the case of the Wagner research, where they did have a control group that took the identical class with an identical syllabus and the same professor, the results of the mean scores for those that participated improved at the end of the semester with a mean score that improved by 16.94% within an 89% confidence level from those that did not participate.

The research will need to be refined to assess further the optimal pedagogical choice of incubator client in the case of the Wagner experiment, or the appropriate start-up company in the case of the Monmouth University program. Abrami et al. (2008) puts forth the proposition that experiential components in measuring critical thinking are not all equal. The type of experiential intervention and depth of the participation of the professor can be a major factor in the success of the program.

While we will need to refine and expand the research to provide more definitive statistical results, the research conducted so far has encouraged Professor Buzza and Professor DeSimone that their respective forms of experiential learning are clearly improving the critical thinking skills of their students.
AUTHOR INFORMATION

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REFERENCES

Appendix D

Qualitative Findings Regarding Pedagogical Experiments

Qualitative Findings Regarding Pedagogical Experiments In Business Classes Performed In Two Colleges To Improve Critical Thinking Skills Of The Participating Students

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John Buzza, Center for Entrepreneurship, Monmouth University, Long Branch, NJ

ABSTRACT

The motivation for this paper comes from need, need for our students to learn not only subject matter through traditional methods in a classroom, but foundational learning through experiences obtained directly in the workplace. The terminology used today for this student experience is referred to as experiential learning. This experiential learning comes in two forms, either (1) learning by yourself or (2) through experiential education (learning through programs established by others). You can kindly refer to learning by yourself as “nature’s way of learning” as it occurs as a direct participation in the life cycle. However experiential education can be defined more succinctly as a structured approach, using experiences and the direction of others to create the learning curve.

The issue at hand is simple - does participatory (experiential) education create critical thinkers among our students and make them more aware of and able to more easily solve the problem(s) at hand? Our diligence has focused on two distinctly different courses in two different semesters (fall 2011 and spring 2012) in two different business disciplines (business marketing and entrepreneurship) at two distinctly different universities (Wagner College and Monmouth University) with one similar problem, is there a significant benefit to experiential learning over traditional classroom pedagogy?

Our findings are profound in the respect that both the participating subjects (students) and the participating businesses achieved significant benefits when this mode of education was used. Our conclusions in the paper signify that although more research is needed to further determine the significance of the impact of experiential learning, we have come away with a true picture of the educational benefits to the students and the productive benefits to the clients involved. An experiential educator’s role is to organize and facilitate direct experiences of phenomenon under the assumption that this will lead to genuine (meaningful and long-lasting) learning. This often also requires preparatory and reflective exercises BOTH inside and outside the classroom.
INTRODUCTION

In the previous article by DeSimone and Buzza, entitled “Experiential Learning: Improving The Efficacy of an Undergraduate Business Degree” (2013b), the authors reported their quantitative findings of a research study to measure the improvement in Critical Thinking (CT) Skills by students when two different experiential pedagogies were embedded into two different business courses. In short, the authors of this pedagogical research hypothesized that including an experiential component into marketing and entrepreneurial management business classes by itself, regardless of the type of the selected business type (referred as clients), would improve the critical thinking skills of the participating students. It also was hypothesized that critical thinking skills would improve during the course of only one semester. The study concluded that the hypotheses were correct. Since the overall research included two different instructors in two different institutions of higher education teaching 5 different courses, it was reasoned that sharing qualitative information regarding the study may also be of value toward the development of business school curricula to enhance critical thinking and creativity. This paper is an analysis of the opinions about the experiences during the studies, which were collected as interviews, independent mid-semester reviews, and student course evaluations as well as some requested formal and informal feedback from the participating clients and their related associates. The participants agree with the opinion of Cook at al. (1996) that one of the main problems regarding teaching critical thinking skills is that there are different conceptualizations of the meaning of CT itself and the institution of a wide variety of methods to accomplish the teaching of these skills. As far as the teaching of CT in business is concerned, Rippen et al. (2002) investigated the use of case-study-methods to teach critical thinking. Celuch and Salma (1998) identified methods of integrating CT skills exercises into business courses and Catanach, Croll & Crinaker (2000) studied the use of classroom-“hands on” activities in CT. Reid (2010) used on line courses to improve students’ CT skills. Haynes and Bailey (2003) studied the use of detailed questioning in the classroom as a way to promote these skills. Cassidy (2006) studied the effects of peer assessment to improve “employability skills.” Paulson (2011) used a reality based group communication problem to enhance CT in the classroom. In fact, CT is often compared to the scientific method in that it is a systematic and procedural approach to the process of thinking. Snyder and Snyder (2008) and Paulson (2011) believe that ill structured problems should be introduced to improve students’ CT skills. While valuing all of the above mentioned approaches to engage business students in critical thinking, the authors of this paper
believe that integrating various experiential components into the syllabi of business classes is essential. Reporting the opinions of the other participants about our above mentioned previous research can provide further guidance for those who may consider the continued use of this pedagogical approach.

The Original Study Design of the Two Experimental Classes

One of the concepts for the initial study (DeSimone & Buzza, 2013b) was integrating businesses (“Clients”) that require and are interested in marketing support with undergraduate business students in an advanced marketing class. In short, students were given the choice to participate on teams created during the class to negotiate and supply marketing services to the selected businesses over the course of a semester. This alternative was offered instead of a traditional final exam. There were some students that volunteered to participate in the experiential learning component, and some students that elected not to participate and take a traditional final exam instead. Therefore, we were able to observe a group of student participants and the non-participating students as a control group.

The other entrepreneurial related courses used the launch of a new product/service idea to create and develop an entrepreneurial start-up as its experiential component. In short, the students were asked to submit two new product ideas each, which are gradually vetted to the selection of one new product idea to be actually developed during the semester. Once the entrepreneurial new product was established, the students were broken into functional teams that actually launched the product by the end of the semester.

The evolving various new class-concepts gave the authors a wide open opportunity to implement structures into the syllabi that could improve critical thinking skills of the participating students.

MATERIAL AND METHODS

This paper’s aim is to share the findings of the qualitative evaluation of the two teaching methods and how using experiential components in different ways influenced student learning of critical thinking. The procedures and methods of the opinion collection used in each of the two studies are described. The narrative of opinions collected for the courses taught at Wagner College are followed by the narrative of opinions collected for the courses taught at Monmouth University.
Courses Taught at Wagner College

At Wagner College, we had two designated courses: (1) Consumer Behavior (MK 301) and (2) Advertising (MK 311).

Opinion Collection from the Clients

As it relates to the participating businesses (Clients) in the experimental marketing courses taught at Wagner College, at the end of each semester the instructor sent an email to the client’s representative thanking him/her for their participation and asking for opinions and suggestions about the entire process of the course. In addition, when possible, there was a final wrap-up meeting between the client representative and the instructor to discuss the experience in further detail. At the end of each semester, after the students made their final presentations to the client(s), any updates received from the client(s) (i.e., an advertisement, promotion, etc.) was recorded by the instructor and shared with the students. All correspondence and documents related to each semester’s endeavor were collected and filed.

Opinion Collection from the Instructors

The authors of this paper communicated with the other faculty members across the college regularly on an informal basis, and conducted two formal interviews during and following the courses. During the semesters the authors maintained a file (a kind of diary) where they kept all their notes and/or comments together with comments from colleagues’, and other participating parties. All documents were filed per semester for further referencing.

Opinion Collection from the Students

Feedback from the students was received through their comments pertaining to the semester-end presentations, and/or on independent mid-semester diagnostic reviews, performed by a “neutral” instructor from outside of the business department. Additional student comments were received from the-end-of-semester student/teacher evaluation forms and informal student/instructor conversations throughout the semester. All documents were filed per semester for further referencing. Some additional, unsolicited correspondence was also received from related parties and filed.

Informed consent forms were collected from all participants and commenters allowing the authors to use the information as part of a publication without mentioning names.
Courses Taught at Monmouth University

At Monmouth University, there were two designated courses: (1) Entrepreneurship (BM 451) and (2) Small Business Management (BM 434).

Opinion Collection from the Business Partners and Vendors

As it relates to the participating businesses and vendors in the entrepreneurial courses taught at Monmouth University, at the end of each semester the students presented their developed business plan to all involved parties in a formal presentation. In addition, when possible, there were ongoing discussions between the instructor and the involved partners to discuss the prospects of the new start-up business in further detail. Since the start-up venture was normally refined during the following Small Business Management classes, any updates and/or refinements was recorded by the instructor and shared with the students. All correspondence and documents related to each semester’s endeavor were collected and filed.

Opinion Collection from the Instructors

The authors of this paper communicated with the other faculty members across the University regularly on both a formal basis, through fund requests, and on an informal ongoing basis to refine the overall offering for implementation. During the semesters the authors integrated those refinements into the business plan as appropriate. All documents were filed per semester for further referencing.

Opinion Collection from the Students

Feedback from the students was received through their comments pertaining to the semester-end presentations. Additional student comments were received from the-end-of-semester student/teacher evaluation forms and informal student/instructor conversations throughout the semester. There were also meaningful discussions about the class content and the role of the students when the instructor helped students establish their entrepreneurial experience on their resumes. All documents were filed per semester for further referencing. Some additional, subsequent unsolicited correspondence was also received from students well after the semester was completed. This correspondence was also saved and recorded.

RESULTS/DISCUSSION

The opinions concerning these teaching methods will be described and discussed independently for the two institutions and the two course types in three independent categories, (1) Instructors opinion, (2) Business participants’ opinion and (3) the Students opinion. Note that all of these three categories have or may have different or even contradicting interests and
perspectives. The summary of these different perspectives will be presented in the Conclusion section of this paper.

Opinions About Courses Taught at Wagner College

1. The Instructor’s Perspective

The overall feeling of the instructors is that this form of pedagogy is very effective in the application of the course’s domain knowledge. The students learn the domain material better, gain context from the client representative’s perspective, and obtain an understanding of the expected “pace” to finalized marketing deliverables by deadline. Some instructors believe that the class time dedicated to the experiential teams result in a reduction of the amount of time allotted to lectures and discussion. However, this time tradeoff is partially offset by the additional time the teams need to spend outside the classroom to prepare the marketing deliverables. All the involved instructors unanimously agree that this type of course demands considerable time from the instructor to continually communicate between the client and the student team. All the involved instructors reported increased activity in helping the teams with their final marketing deliverables because, as they expressed, their reputation is on-the-line with the client and the students. The instructors also pointed out that they must have spent considerably more time and effort than in a regular class to understand the client’s business and sufficiently initiate the students’ activities. All agreed, however, that the experiential component is much more effective when the students have the opportunity to voluntarily choose their client team as oppose to be appointed. With this voluntary approach, the student is working on a type of business that s/he have some interest in. Instructors also conclude that students within the teams are motivated toward those components of the marketing assignments to which they have better background or abilities, such as the ability to draw or experience in graphic design, etc. Most of the instructors agreed that the scheduling of the student team meetings and establishing communication between the students and the clients are challenging. For example, students have spring breaks, long holiday weekends and times allocated for college sports, while businesses operate on a continual basis. All the instructors involved believe that the final student presentations to the client representatives were a positive learning exercise and the professional feedback and resulting discussion was “eye opening” for the students. While the instructors were convinced that the experiential exercise improved critical thinking skills of the students, the assessment results collected via essay prompt evaluation did not consistently prove to be statistically significant. The students seemed to put more effort into the pre-test essay prompts as opposed to the post-test prompts. This coincides with findings by Celuch and Salma (2002) that students tended to over perform on the pre-test.

The essay-prompts were reviewed by a number of uninvolved instructors and an unrelated research organization within Wagner College. Great pains were taken to ensure that the Graduate Assistants (GA’s) that scored the essays were objective, and the NSF Solo Taxonomy’s scoring rubrics were used in a reliable and valid way (Biggs & Collis, 1982; Chan, 2002; Hattie & Purdie, 1998). However, some instructors believed the GA’s training in the scoring process may have been insufficient to understand the nuances of scoring critical thinking in an open essay. In future studies, the authors would suggest that professionals skilled in
assessing CT essays should be used to score the essays. It is also the opinion of the involved instructors that the students do not take all the provided 20 minutes to respond to their essay prompts. It is more evident when the post-semester essay prompts were given. Some instructors argued that because the prompts were anonymous and did not affect the students’ grade, the students had limited motivation to apply their maximum CT skills on the post-test.

2. Clients’ Perspective

Initially all of the Clients loved the concept when they were first recruited and decided to participate. As the research matured in each new semester, it was easier to obtain new and diverse businesses to participate in the program. After all, the Clients were the ones who received the benefits of free labor from a team of marketing undergraduate students. They were generally receiving marketing deliverables (as most clients do not have the in-house skills to produce), and they obtained the consultation of an experienced marketing business instructor. In addition, many of the Clients responded that they could take advantage of the available Wagner College infrastructure, using services like the library, the print shop, the IT department, graphic arts programs and applications as well as the provided office and classroom space. Most of the interviewed Client’s representatives expressed that they took pleasure in sharing their business experiences with the students and the instructors. The general opinion of the Clients was that they benefitted most from students’ creative ideas for their businesses (often referred to by the clients as a unique perspective), and the students’ enthusiasm and a willingness to work. It also became evident from the interviews that the student teams seemed to fall short of Client expectations when it comes to the practical application and the execution of the “scope of work”. This coincides with the current literature that there is a considerable skill gap in CT skills between current undergraduates and the expectation of the workplace (Andrews & Higson, 2008; Casner-Lotto et al., 2009; Cotton, 2001). In many ways, this observation alone justifies the need for this type of pedagogical approach. It was also found that considerable time must be initially invested by the client representative to orient the students to their business issues, and their marketing challenges before constructive work can begin on the agreed “scope of work”. Furthermore, many of the successful marketing initiatives, (i.e. blogging or email marketing campaigns) need to be continued after implementation to maximize the return on investment. In many cases this has been resolved through ongoing internships. In some cases, this continuation is not a smooth transition. In the opinion of most Clients, the student groups should be continued beyond a single semester, as is possible in the Monmouth University program. This is supported also by CT research by Hernandez-March et al. (2009).

Specific Comments by Clients include:

- “I think this idea opens up the options for a variety of projects such as social media, partnerships with non-profits, individual/corporate sponsorships and event planning”
- “From the very first meeting, these students have had creative and innovative ideas to reach out to students and administrators”
- “Students tend to be creative, come to the table without biases and are eager to work”.
- “Each team provided strategies to develop additional programs and events to bolster gate admissions and organizational revenue”
- “WOW! WOW! WOW! The instructor just shared the video [that the student team produced] with me. It truly brought tears to my eyes. I look forward to sharing the video with our upcoming Board of Trustees meeting next week”
- “Thank you and I would like to participate again next semester. Should I send you one or two project descriptions for your review?”

3. Students’ Perspective

The students overwhelmingly liked the option of participating in an experiential learning exercise. Many of the students that did not participate said that they did not participate due only to time or travel constraints. For those that did participate, most believed they gained an invaluable experience, as evidenced by the fact that many of the participating students use this experience on their resume in the same way as an internship might be used. On rare occasions, there were some comments from those that did not participate that they felt a little “left out” during class discussion regarding one of the Client businesses, but the large majority believed the entire class was better because of the experiential component. On the other hand, travel and logistics did present some challenges. Many of the students did not want to travel off campus, or meet with their groups outside of regularly scheduled class hours. Many also stated that it was a considerable amount of work in addition to the typical course syllabi.

Below are some direct student comments that reflect the student sentiment about the syllabi including the experiential component:

- “This is a good option since some students enjoy out of school learning rather than studying for finals”
- “This is a great option. However, due to time constraints, it is not possible for many students to take advantage of it”
- “This offers hands-on work and real experience, and the two choices [volunteer decision for participating or not participating] make the whole class happy”
- “I was able to get a feel for the marketing field in the experiential group”
- “Experiential teams were “really” helpful”

4. Opinion of Other Participants

Other specific participants included the Graduate Assistants that aided the authors with the quantitative research, client participants that were not specifically the client representative, and other professors that provided advice during the research process. Their feedback during the course of the research process helped to formulate the perspectives shared by the authors of this paper.

Opinions About Courses Taught at Monmouth University

1. The Instructor’s Perspective

While the Monmouth Entrepreneurial Studies Program is popular with students (see below), the instructor found that the classes are not particularly scalable to other instructors and a program expansion in its current form. Instructors for this type of program need a special
commitment and relevant entrepreneurial experience. The instructor’s workload is considerably more than a class without the entrepreneurial component. A specific communication system needs to be established (it is accomplished largely by computer at Monmouth), which the Director of the Program believes requires constant monitoring and feedback from the instructor. In the case of the Monmouth University entrepreneurial program, there is real money on the line. Therefore, the students get a taste of true business risk. While the students benefit from this exposure because it is a difficult concept to teach in the classroom, the instructor needs to be on top of each project. As stated above, in the Wagner College experiential component, continuity of service has been a problem with some of the Clients. In the Monmouth program, this continuity problem has been partially addressed because the Entrepreneurial Studies class develops the start-up company, and the small business administration class is available to continue the progress of the start-up beyond the initial semester. Because of the functional team approach, there must be ground rules set at the beginning of each class. The instructor lets the students know there will be additional time spent outside of class (generally 15 hours per week) and that absences will not be tolerated (he generally allows one absence per semester) In exchange, the student will receive “real life” business experience, and an entry on their resume that could be more valuable than any internship. The classes also result in a developed business concept, business plan and launch plan that can easily have value to the students of Monmouth or an outside entity for purchase from the University.

2. Opinion of Different Partners Involved Into the Activities of the Entrepreneurial Experiential Component

Contrary to the experiential program at Wagner College, the partners involved in this program are often treated strictly as vendors. While the “clients” in the Wagner College program are asked to participate in a sort of three way education of the students, the participants in the entrepreneurial program at Monmouth University are primarily business partners. The instructor interviews the potential partners to orient them to the program, but partners are selected based on the typical “due diligence” of a vendor selection. The instructor, particularly in the entrepreneurship course, lays out the ground rules to the potential business partners and makes it clear there is some “mentoring” that is expected when the opportunity presents itself.

Again, contrary to the Wagner College program, the business partner has grading responsibility. The experiential component is graded based on the instructors observations, the functional team leader’s peer evaluation and the evaluation of the business partners involved with that functional group.

3. Students’ Perspective

The courses for the Entrepreneurial Studies Center are highly popular, and generally receive excellent reviews from the students. Some comments in the ratemyprofessor.com website about the entrepreneurial class include:

- “He is one of the best Prof. at MU. He is very clear about the class. 1st day of class he tells that
he requires you to put effort. It is more like a business environment than a class. If you are taking
18 do not take this class because, there is lot of work for this class”.
- “Buzz is the best professor without a doubt. His class is absolutely amazing and the coolest
people ever take his class, so if you’re one of them, take it!!”

In an effort to complete the entrepreneurial project within the semester, deadlines are common. The students come to understand the importance of deadlines as they will be accustomed to in the business world.

However, the courses are not for everyone. It is more work than a normal class for the student. There are peer evaluations so students cannot easily “hide” from their responsibilities inside or outside class. Furthermore, there needs to be “buy in” from the students to optimize the value of the classes. Obviously, not everyone’s idea can be selected. The selection process is fairly structured and the entrepreneur product is democratically chosen, but there is always a chance that some members in the class are not enthused by the selected project. The instructor’s credibility is essential to the fairness of the selection process and to achieve this “buy in” from the students.

As a tangible benefit of the program, the students often come to the instructor for letters of recommendation and/or help with the wording used for their entrepreneurial experiential component on their resumes. It is apparent that students see the benefit of the program for career planning purposes. On the other hand, there is a time component that is difficult to manage. For example, in the recent Hurricane Sandy storm in New Jersey, the teams lost momentum and had to scale back expectations for the semester. On balance, however, most students that participated cherished the learning experience.

GENERAL CONCLUSION

This paper is an analysis of the reports of subjective findings regarding the experiences of the instructors, students, clients and other related participants while conducting quantitative research in the two programs above.

In the Wagner marketing experiential exercise, it was a rewarding experience for Instructors, Clients and Students. The instructors and students were exposed to current business practices in marketing, and the clients and their representatives became acquainted with a fresh academic approach to their business, and to the perspective, creativity and energy of the student teams. Students can receive letters of recommendation from the clients and their representatives and lasting contacts in their local business environment. In a time where discussion of the “skill
“gap” is prevalent in business media, this pedagogical form fulfills the needs of both employers and potential employees.

In the Monmouth entrepreneurial experiential exercise, the Instructor becomes part of the community, raises money for the University, and creates a product or service idea that lasts beyond the semester. It is a rewarding experience for all concerned. The students obtain real exposure to the risks and rewards associated with the entrepreneurial exercise. The students also see how their functional skills (i.e. finance, accounting, law, etc.) fit into the small business environment. In a time where the country is encouraging entrepreneurship among younger people, this pedagogical form fulfills this goal.

AUTHOR INFORMATION

**Frank DeSimone** is currently Assistant Professor of Business Administration and Director of External Programs at Wagner College in Staten Island, New York. He holds a Masters of Business Administration from New York University and is currently working towards his Dissertation for his Ph.D. from the International School of Management headquartered in Paris, France. Contact: Department of Business Administration, Wagner College, One Campus Road, Staten Island, NY 10301. E-mail: frank.desimone@wagner.edu (Corresponding author)

**John S. Buzza** is currently a Specialist Professor at Monmouth University and the Director of the Monmouth University Center for Entrepreneurship. Monmouth University is located in Long Branch, New Jersey. In 2010, the Entrepreneurship course taught by John Buzza received the “Most Innovative Entrepreneur Course Award” in the Country by the United States Association for Small Business and Entrepreneurship. (USASBE) E-mail: johnsbuzza@att.net

Acknowledgements: The authors of this paper express their appreciation to Dr. Z Fulop for his kind advice and guidance in this article; Dr. M. LoRe for advice and editing the paper and to D. Schaub for guidance and organization of the literature research and references.
REFERENCES


Appendix E

Marketing Experiential Clients Included in Wagner Study One

Below is a table of the description of the marketing incubator clients included in this study, their type of business organization, and the negotiated marketing deliverables.

<table>
<thead>
<tr>
<th>Description of client</th>
<th>Type of business/organization</th>
<th>Marketing deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>House for unwed mothers</td>
<td>Non-profit</td>
<td>Fund raising DVD</td>
</tr>
<tr>
<td>Divorce Arbitration</td>
<td>Start-up, services</td>
<td>Creative concept</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promotional flyers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speaking engagements</td>
</tr>
<tr>
<td><strong>Spring 2011</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Zoo</td>
<td>Quasi-Government</td>
<td>Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promotions</td>
</tr>
<tr>
<td><strong>Fall 2011</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports Marketer/Publisher</td>
<td>Small company-sports marketing</td>
<td>Event Planning</td>
</tr>
<tr>
<td>Catering</td>
<td>Medium size- Food catering/parties</td>
<td>Research</td>
</tr>
<tr>
<td>Environmental</td>
<td>Non-profit</td>
<td>Geographical expansion</td>
</tr>
<tr>
<td>Theatre Department</td>
<td>College Marketing</td>
<td>Social networking plan</td>
</tr>
<tr>
<td>Chamber of Commerce</td>
<td>Quasi-government</td>
<td>Creative development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Event marketing</td>
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<tr>
<td></td>
<td></td>
<td>Social networking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Event Promotion</td>
</tr>
<tr>
<td><strong>Spring 2012</strong></td>
<td></td>
<td></td>
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<tr>
<td>Retail Jewelry Store</td>
<td>Small business-repositioning</td>
<td>Print Advertising</td>
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<td>Networking Speaker</td>
<td>Start-up – services</td>
<td>Radio Advertising</td>
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<td>College Marketing</td>
<td>Concept Development</td>
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<td>Women’s security products</td>
<td>small company -</td>
<td>Visual development</td>
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<td>Social Networking plan</td>
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<td>Market speaking engagement</td>
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<td>Off-site promotion</td>
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<td>Social Media</td>
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<td></td>
<td></td>
<td>Distribution plan</td>
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<tr>
<td></td>
<td></td>
<td>Social networking</td>
</tr>
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</table>
Appendix F

MK301 Fall 2011 Course Syllabus

Marketing 301-Consumer Behavior
Fall 2011
T/R 1:00 to 2:30
Spiro Hall 5

Professor Frank DeSimone

Text: Consumer Behavior, Tenth Edition, Schiffman, Kanuk

Course outline: A study of theories related to consumer behavior as part of the buying process. Topics include needs, attitudes and beliefs, and cultural, family and reference group influences. Prerequisite MK 201-Junior or Senior standing

Course Objectives:

1) To learn in depth about the overall psychology of the consumer
2) To learn about consumer consumption of media
3) To gain a deeper understanding of yourself, so as to be able to apply and compare yourself as a consumer with other marketing demographics.
4) To gain a detailed understanding of the consumer purchase process.
5) Apply consumer behavior concepts creatively through the use of exercises and case studies.
6) Succinctly express consumer behavior theories, ideas or practical application to the class.
7) Be able to select visual advertisements that express what is taught in theory.
8) Demonstrate the ability to apply text material to critical thinking and in creative depth

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues Aug 30</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Thurs Sept 1</td>
<td>Chap 1</td>
<td></td>
</tr>
<tr>
<td>Tues Sept 6</td>
<td>Chap 4</td>
<td></td>
</tr>
<tr>
<td>Thurs Sept 8</td>
<td>Chap 4</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>Tues Sept 13</td>
<td>Chap 5</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>Thurs Sept 15</td>
<td>Chap 5</td>
<td></td>
</tr>
<tr>
<td>Tues Sept 20</td>
<td>Chap 6</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>Thurs Sept 22</td>
<td>Chap 6</td>
<td></td>
</tr>
<tr>
<td>Tues Sept 27</td>
<td>Chap 7</td>
<td></td>
</tr>
<tr>
<td>Thurs Sept 29</td>
<td>Chap 7</td>
<td></td>
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<tr>
<td>Tues Oct 4</td>
<td></td>
<td>Verbal Midterm</td>
</tr>
<tr>
<td>Thurs Oct 6</td>
<td></td>
<td>Verbal Midterm</td>
</tr>
<tr>
<td>Tues Oct 11</td>
<td>Fall Break</td>
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</tr>
<tr>
<td>Thurs Oct 13</td>
<td>Chap 8</td>
<td></td>
</tr>
</tbody>
</table>

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Assignments/ Grading

A summary of the Grading will be
Class participation/preparation and attendance 20%
Exercises (written) 20%
Cases (Written) 20%
Verbal Mid-Term and Final 20%
Written final 20%

Extra credit options
Pilot marketing “ incubator” program 10%
Advertising presentation to class 10%

Class participation/preparation and attendance

All students are expected to have read the textbook chapter assigned prior to class. Since this is a
course about consumers, and we are all consumers, class participation is essential to the full
understanding of the topic. Since class participation is important to the class, attendance is part
of this grade category. If any student misses more than 2 classes, a half grade will be lost for
each absence above 3. If any students are involved in sports and will need to miss a class due to
the game, they must hand in the game schedule the first week of the semester.

Exercises

The best way to learn is by actually doing exercises to learn. You will be given a series of 5
exercises to perform. You must read and prepare to discuss each exercise but will be graded on
the two of them you elect to write and submit. They will be worth 10 points each. The grading
will be based on your creativity in performing the exercise, what you were able to learn from the exercise, and how well you were able to express what you learned to the class for applicability. All written materials are to be type written and given by hard copy in the class. Late papers and email cases will not be accepted unless given prior approval. A portion of the class will be selected to present their selected advertisement to the class for discussion.

Cases

One way to evaluate the ability to apply what you have learned is through case study. The case studies in this text are very short. You are to be prepared to discuss the case studies assigned for each of the classes as designated in the schedule above. However, you are responsible to hand in two case studies in writing for grading purposes. They will be worth 10 points each. All written materials are to be type written and given by hard copy in the class due. Late papers and email cases will not be accepted unless given prior approval.

Verbal Midterm and Final

It is critical that you are able to express yourself clearly about a range of marketing subjects. I will give the class questions for preparation, and they will be responsible to answer those questions in class without notes. This is more like a true business meeting! You will be graded based on your command of the topic in the question, and your ability to demonstrate an understanding by using relevant examples

Final Written Exam

This assignment will explore your ability to take three topics of interest to you from the textbook, and to write about it in more detail. For example, you may update the topic through research, disagree/agree with the topic through creative expression or example, and use personal experience to provide a unique perspective on a topic or visually build on a topic beyond what the text has written. You will be graded based on your creativity and depth of thought. You should use two typewritten pages per topic as your guide. A list of potential successful topics is attached. A “pilot” incubator project will be offered to students as an alternative to this final.

Special Note: If you have a disability for which you may be requesting an accommodation, you are encouraged to contact both your instructor and Dina Assante, Associate Dean, Center for Academic and Career Development, Union building, 718-390-3181 as early as possible in the semester.

Contact and Office hours:

Office Campus Hall 216
Office Hours: Mon/Wed 1:00 to 3:00, Tues/Thurs 9:30 to 11:00
Phone 718-420-4491 (X4491 within school)
Email frank.desimone@wagner.edu
Wagner College
MKT 311
Advertising
Tues/Thurs 1:00 to 2:30
Union 201

Professor Frank DeSimone


Course: a study of various aspects of advertising which pertain to individual and group behavior in the buying process. Topics include messages and media as related to promotion, personal selling, publicity and Public Relations.

Course Objectives:

1) To provide students with a “hands on” experience to create a complete and detailed Advertising Plan
2) To provide students with practice to understand how vital research information will impact an advertising campaign.
3) To understand the detailed functions of an advertising agency by performing as an agency throughout the semester.
4) To give students valuable experience in managing the creative process, both individually and as a group
5) To improve student presentation skills
6) To integrate the detailed understanding of advertising and to apply visual creative skills to an advertising campaign.
7) To improve the student’s ability to express creative ideas, both verbally and in writing.
8) To improve “critical thinking” skills as it relates to effective group communication, and the integration of marketing skills into an effective advertising campaign.

Schedule:

<table>
<thead>
<tr>
<th>Day /Date</th>
<th>Chap/Class</th>
<th>Assignment</th>
</tr>
</thead>
</table>

Grading:

Class Participation/Preparation/Presentation 20%
Cumulative individual work:
- Research
- Advertising Plan
- Creative Brief 30%

Team Projects:
- Print Ad
- TV/Radio Ad
- Social Networking 30%

Advertising Agency Group Presentation 20%

Extra Credit for Incubator team involvement or Case/article/exercise preparation 10%

Explanation of grading assignments

Class participation (20% of the grade) - is critical to success in the class. You will be graded on your attendance, your participation during lectures, your knowledge of the assigned text material and your creativity during team consulting sessions. You are expected to attend each class and be fully prepared. More than 3 absences during the semester will result in a loss of grade for each absence more than 3. Lateness to class (or leaving early from class) will result in a ½ day absence charge. Because of the nature of the team agency concept used in the class, some class time is being given for team preparation and consultation. However, it is probable that you will need to meet with classmates in addition to the normal class schedule. Since 50% of the final course grade depends upon your team presentation, other students will be counting on you to provide quality work and schedule availability.

Midterm Exam (30% of the grade) - You will be asked to prepare an individual written research paper, an individual Advertising Plan, and an individual Creative Brief. Each one will be separately due on a specific date on the syllabus. On that date, students will be asked to present their work at random. The entire body of work will be handed in for grading at one time when the midterm is due. This will give the student an opportunity to refine and improve the package as the semester progresses. It will also allow me to assess the consistency of your creative approach.

Team Creative (30% of the grade) – The teams will be asked to prepare three pieces of creative during the second half of the semester. There will need to be a draft print ad, a draft TV or Radio Ad and a Social Networking concept. Again, Teams will be able to continue to refine their creative based on feedback, new ideas or information gained from the text or lectures. Grading will be a combination of my assessment of the team creative as a whole and grades given by your teammates.

Final Advertising Team presentations (20% of the grade) – These presentations are actually the result of all the work you have done during the semester. Each team will make a formal presentation to the class of their detailed advertising plan, or of their actual action plan if they were part of the incubator teams.
Extra Credit (10% of the grade) – For those students that participate in the incubator program, they will be able to obtain extra credit of up to 10% for exceeding either the quality or quantity of the scope of work expected by the “client”. For those who do not participate in the incubator program, you will be given an opportunity to earn up to 10% via a written analysis of an article, a case study or an advertising related exercise.

Some general teaching observations:

1) This class is tightly designed to mimic the real world of advertising agencies. I am sure you can understand what would happen in a real agency if the employees did not make deadlines, were not available for presentations, lost their PowerPoint files, and/or did not fully prepare and practice for client meetings. You should look at your assignments as “real world” project deadlines!
2) You will not always like or agree with your teammates. I am sure you recognize that this is the way it is in actual advertising agencies! How you deal with this is part of the learning process and will tend to affect your final result, and therefore your grade.
3) The incubator project is a research study which tests the hypothesis that “critical thinking” is improved when students are working with an actual company on an actual project. This will be explained more fully later in the semester.
4) Because this research is being conducted as part of the Professor’s Doctoral dissertation, each student will be asked to do a critical thinking exercise at the beginning and the end of the semester during class time.

Contact Information:

Email: frank.desimone@wagner.edu
Phone 718-420-4491 (extension 4491 within campus).
Office Hours: (Room Campus Hall 216)
Monday through Thursday – 2:30 to 4:00
Appendix H

Questionnaire to Establish Teams for MK311- Spring Semester 2012

Questionnaire to establish teams for Mk 311
Please complete:
Name:
Do you intend to participate in one of the incubator teams  Yes  No
If yes,
Please circle the one you are considering
  Casale Jewelry
  West Brighton LDC – SI Green
  Wagner Theatre Department- Snug Harbor
  ARMHER
If no,
Please list the company product or service you did your research on

What special creative skills do you possess? Please circle those that apply to you
Computer design  Poetry  Copyrighting
Photography  Drawing  Film/Theatre
Editing
Appendix I

MK 301 Marketing Client List Participants

Friday, September 16, 2011

Consumer Behavior - MKT 301
Existing options for “Wagner College Marketing Incubator Program” in lieu of written final +
the opportunity to earn 10% extra credit toward your final grade.
Committed

USA College Sports – Contact: Dennis Wilson, President
Two of our students are already interns with this organization
Class Participants: John Dileo, Sam Aiello, Edgar Sheppard, Jakki Guenther, Lauren Falco,
Brittney Thorpe

A Taste of Honey – Contact: Evelyn Rogers, Owner
Long Established Catering organization located on Victory Blvd
Class participants: Matt DeZarlo, Michelle LoFaso, Doug Donato

Snug Harbor Cultural Center and Botanical Gardens – Contact: Susan Lewis, Business
Manager
Since the Wagner Theatre department will be having its fall plays at Snug Harbor, there
may be an opportunity to combine the promotion of our plays with Snug harbor
promotion
Class Participants: Danielle Dallacco, Emily Darveau, Christine Rizzolo, Kathryn Welch

SI Green Initiative Program- Contact: Angela D’Aiuto, Executive Director
Participate in the creative design of marketing materials to attract businesses to “go
green” following specific steps. Project also available include the branding of the4
initiative, developing a social networking project, and/or creating an Earth Day
promotion.
Class Participants: Rachel Moser, Alyssa Fasolino, Matthew Testa, Jill Parino

The Staten Island Chamber of Commerce- Contact Linda Baran, President
Multiple projects to promote and advertise on Staten Island
Class Participants: Alyssa Ahern, Monica Zurich

Creative Media – Contact: Rich Grado, President
Marketing Printing Business located on Bay Street and Willow Ave.
Class Participants: Nicole Todisco
Appendix J

Casale Jewelers Scope of Work Proposal

Casale Jewelers Proposal
Alyssa Grecco, Kramer Berg & Brian Faughnan

Our main objectives are to show how Casale is ‘truly unique’ by highlighting refurbishment and customization of jewelry and build relationships with consumers to increase the number of customers coming in the store.

We will achieve this through:

1. Creating a customer database
   a. Various database sites available online
      i. Help in tracking which advertisement are effectively reaching the market (if they are a first time customer) to avoid unnecessary ad spending.
      ii. Mark buying habits of consumer
      iii. Collect Email/Zip code
      iv. Include inquiry of valuable dates the consumer may want to receive promotions or reminders for (i.e. child’s birthday month, anniversary, etc.)

2. Setting up a “Friends and Family” promotion with current customers
   a. We will create a flyer to hand out to current customers to pass onto others
      i. Can also be executed by social media
         1. Possibly valid from mid-April through Mother’s Day
         2. Customers will receive 10% discount with purchase by presenting the flyer
            a. Expand market and increase the number of people coming to the store

3. Set yourself apart from other jewelers by highlighting customization and refurbishments of jewelry
   a. Creation of an “advertorial” around a customization experience
      i. Including a photo of the old pieces and new piece and the customers feedback on the experience

4. Free Inscription with a purchase of $250 or more
   a. Create advertisement through social media and flyers

5. We have a contact with a board member of the Miss New York Pageant
   a. Teresa (Terry) Trangelo
      i. TTarangelo@signatureny.com
   b. Get involved with pageant through sponsorship
   c. Lending jewelry to contestant
   d. Gain free advertising by intelligent women looking to make a difference in the world

6. Add a marketing intern to your team
   a. Help in keeping up with social networking
   b. Track advertising spending
      i. What is working and what is ineffective
   c. Spread promotional ideas to public
Appendix K

National Science Foundation Taxonomy Scoring Grid used at Wagner College for the Teagle Foundation Grant

**Scoring Grid for the Teagle Grid**

<table>
<thead>
<tr>
<th>Level</th>
<th>Level Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No understanding demonstrated. Response does not address the question or restates the question.</td>
</tr>
<tr>
<td>2</td>
<td>Limited understanding of the topic. Response focuses on one conceptual item in a complex case and is not accurate or partially accurate.</td>
</tr>
<tr>
<td>3</td>
<td>Limited understanding of the topic. Response focuses on one conceptual item in a complex case and is accurate.</td>
</tr>
<tr>
<td>4</td>
<td>Understanding of several discrete components. Response is a collection of multiple items that are not related within the context of the exercise.</td>
</tr>
<tr>
<td>5</td>
<td>Understanding of several components that are integrated conceptually. Response may not prioritize information or be appropriate to the scale of the question.</td>
</tr>
<tr>
<td>6</td>
<td>Understanding of several components that are integrated conceptually. Response prioritizes information and is appropriate to the scale of the question.</td>
</tr>
<tr>
<td>7</td>
<td>Understanding demonstrated at a level extending beyond what has been dealt with in the question prompt. Response generalizes to situations beyond the scope of the question.</td>
</tr>
</tbody>
</table>
Appendix L

MK 301 Autumn Semester 2010 Research Survey and Prompts

Fall 2010 Research Survey and Prompts
Survey for MK 301
November 29, 2010

1) Were you a participant in one of the experiential projects in lieu of the final written exam? (I.E. Spring House or Anti-family Court) Please circle Yes

No

2) Critical Thinking is defined by Wikipedia as “purposeful reflective judgment concerning what to believe or what to do”. On a scale of 1-7, do you believe the MK 301 course has improved your critical thinking skills, with one being the lowest and seven being the highest?

1 2 3 4 5 6 7

3) Creativity (according to Wikipedia) refers to the phenomenon whereby a person creates something new (a product, a solution, a work of art) which has some sort of value. On a scale of 1-7, do you believe that the MK 301 course has improved your creativity, with one being the lowest and seven being the highest?

1 2 3 4 5 6 7

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt the author puts forth the following comments about advertising

1) “Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace”.

2) “Human behavior is almost entirely purposive. Products are tools people use to get results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes, just alleviate drudgery and heavy labor, just save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be. The same may be said of the personal computer, the tractor, the mutual fund and almost everything else”.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please write neatly. This paper should contain an appropriate level of sophistication and critical thought.
Dear Professor DeSimone,

Congratulations! Your students tell me that you are a superb teacher and that they are very pleased to have you as a professor. When I conducted an evaluation of your MK 301: Consumer Behavior class on October 19, the students gave me the following positive feedback on the course:

- The professor is funny and keeps students engaged
- The textbook is useful
- The professor gives plenty of useful examples in class
- The material itself is interesting and the professor presents it in a relatable way
- There is a lot of interaction between students and teacher, and between students themselves
- The professor is very approachable
- The professor makes lectures very interesting and makes the class “more like a conversation”
- The professor is easy to talk to, helpful and understanding
- The professor communicates the material well
- The professor has a lot of experience of this area and brings this to bear upon the class material; he links the class to real world situations
- The professor is personable and “relates to us”
- We appreciate the extra credit exercises, which also increase participation
- The class discussions help students understand the material
- The professor is always encouraging
- The professor is passionate about teaching

In response to my request that the students consider ways in which the course could be improved, most students said that they were very happy and could not think of any suggestions! A few students made the following comments:

- The lectures are packed with material and concepts, and at times it can be overwhelming.
- The textbook can be confusing; there are good examples of advertisements but the description of these can be unclear.
- “Can we please change the room?” (from Spiro 4).
I was pleased that you provided me with three specific questions about elements of the class on which you wanted feedback. In response to the first question, regarding the oral mid-term examination, the class provided the following feedback:

- It was productive since we had to prepare and learn the material, but there was a lot of preparation that was not graded. (I suggested to this student that this is the purpose of an examination.)
- We like the format of the mid-term but there were too many questions.
- It was a lot of work to complete all 34 questions but it was a good and worthwhile learning experience.
- It reinforced everything that we had learned so far.
- We really liked the business-meeting style as it can be helpful to us in the future.
- It was a good concept and better than taking a test because we learned more, but there were too many questions.
- This was beneficial because it made us learn everything, and it was a fun and short way to take a test.
- We liked that it was “not like every other test.”

In response to the second question, regarding the practice exercises that you use as a follow-up to your lectures, the students gave the following comments:

- The discussion after we hand in the exercise is very helpful. The exercises themselves help reinforce the material.
- We like that we have the choice of exercises to complete, and the completion length is good.
- We like the exercise work, especially the flexibility of being able to choose what subject we felt confident in. The professor provides very thorough feedback on writing to help us improve for next time.
- This is a good experience, we like the extra-credit presentation and we like that we can choose which to get credit for.
- This is good because the professor lets us choose which ones appeal to us, and we can use personal experiences and creative ideas to express our work. The exercises are also relevant to the chapter.
- We like the breadth of the exercises, but we are not sure how long our answers are supposed to be.
- Overall, they are very helpful, and going over them in class is helpful too.

In response to the third question, regarding your idea of offering students the option of completing a final examination or an internship as experiential learning, the students responded thus:

- This is a good option for those who have the time.
- This is a good resume-builder.
- This is a good option since some students enjoy out-of-school learning rather than studying for finals.
• This is a great option. However, due to time constraints, it is not possible for many students to take advantage of; perhaps another option would be creating your own advertisement campaign for a company.
• We like the options, but are concerned about how the two will be graded.
• This offers hands-on work and real experience, and the two choices “make the whole class happy.”

One group of students concluded their evaluation by writing on their sheet that you deserve an A+!

It was a pleasure to visit your class and I look forward to working with you in the future.

Yours,

Natalie Edwards, Ph.D.

Faculty Scholar for Teaching and Learning
Critical Thinking Prompt for MK 301 Distributed to the Class on Tuesday, September 20, 2011

1. Are you a participant in one of the experiential projects in lieu of the final written exam? (List with name assignments attached)
   Please circle: Yes  No

2. Critical Thinking is defined by Wikipedia as “purposeful reflective judgment concerning what to believe or what to do”. On a scale of 1-7, based on the lectures, assignments, and text readings so far, do you believe the MK 301 Consumer Behavior course will improved your critical thinking skills, with one being the lowest and seven being the highest?

   1  2  3  4  5  6  7

3. Creativity (according to Wikipedia) refers to the phenomenon whereby a person creates something new (a product, a solution, a work of art) which has some sort of value. On a scale of 1-7, based on the lectures, assignments and text readings so far, do you believe that the MK 301 Consumer Behavior course will improved your creativity, with one being the lowest and seven being the highest?

   1  2  3  4  5  6  7

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt (1993), the author puts forth the following comments about advertising:

1) Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace.

2) Human behavior is almost entirely purposive. Products are tools people use to get results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes; just alleviate drudgery and heavy labor, just
save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be. The same may be said of the personal computer, the tractor, the mutual fund and almost everything else.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please write neatly in the booklet provided. This paper should contain an appropriate level of sophistication and critical thought.
Appendix O

Critical Thinking Prompt MK 301, December 2011

“Critical Thinking” Prompt for MK 301 (December 08, 2011)

1. Were you a participant in one of the experiential projects in lieu of the final written exam? (List with name assignments attached)

   Please circle:  Yes   No

2. Critical Thinking is defined by Wikipedia as “purposeful reflective judgment concerning what to believe or what to do”. On a scale of 1 -7, do you believe the MK 301 course has improved your critical thinking skills, with one being the lowest and seven being the highest?

   1   2   3   4   5   6   7

3. Creativity (according to Wikipedia) refers to the phenomenon whereby a person creates something new (a product, a solution, a work of art) which has some sort of value. On a scale of 1-7, do you believe that the MK 301 course has improved your creativity, with one being the lowest and seven being the highest?

   1   2   3   4   5   6   7

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt the author puts forth the following comments about advertising:

1) Human behavior is almost entirely purposive. Products are tools people use to get results, to fill needs or solve problems that are not merely technical. A washing machine does not just clean clothes; just alleviate drudgery and heavy labor, just save time. It also creates opportunity to do other, more satisfying and perhaps more worthwhile things, to help one look, feel and be better. To raise one’s spirits, to help one become what one wishes to be.
2) Of course, people put up with a lot – and understand that advertising is a price we pay for choice and free access. Things could be worse. They also know that advertising can help in many ways. It informs, entertains, excites and alleviates. Yes, it intrudes, but it also adds variety and changes the pace.

Please critically evaluate at least two different sides or viewpoints of the two issues above. Please write neatly. This paper should contain an appropriate level of sophistication and critical thought.
Appendix P

Critical Thinking Prompt MK 311, February 2012

“Critical Thinking” Prompt for Mk 311 (fall 2012)  Professor DeSimone
Thursday, February 2, 2012

1) Are you a participant in one of the experiential incubator projects?  Please circle
   Yes  No

2) Critical Thinking is defined by Wikipedia as “purposeful reflective judgment concerning
   what to believe or what to do”. On a scale of 1 -7, based on the lectures, assignments, and
   text readings so far, do you believe the MK 311 Advertising course will improve your
   critical thinking skills, with one being the lowest and seven being the highest?
   1 2 3 4 5 6 7

3) Creativity (according to Wikipedia) refers to the phenomenon whereby a person creates
   something new (a product, a solution, a work of art) which has some sort of value. On a
   scale of 1-7, based on the lectures, assignments and text readings so far, do you believe
   that the MK 311 Advertising course will improve your creativity, with one being the
   lowest and seven being the highest?
   1 2 3 4 5 6 7

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt the author
puts forth the following comments about advertising

1) “Actually, advertising is the least harmful form of propaganda-precisely because it is
   so conspicuously in the service of its source, the sponsor. It is effective on behalf of
   the advertised product precisely because the sponsor exists to assure the customer of
   the reliability and credibility of his or her promise, because the sponsor is visibly,
   eagerly and reliably there to stand behind the product, to give customers the assurance
   they need to buy in the first place”.

2) “Everybody knows, without help from Ralph Nader, that commercial
   communications are not engineering descriptions of the real thing. Nobody wants to
   hear that a perfume is a complex concoction of extracts from the lining of the mollusk
   and urine from the civet cat, or needs to be told it performs certain practical functions.
   As with many utilitarian products, people seek not just what they deliver
   operationally but also (perhaps especially) what they promise emotionally or suggest
   symbolically. In much consumption we are motivated by hopes greater than what we
   can deliver reasonably, by wishful possibilities that go beyond the ordinary and
   transcend reality. In response to such motivations, advertising supplies exactly what
   the painter with an easel supplies, not simple photographic reproductions”.

Please critically evaluate separately in the booklet provided at least two different sides or
viewpoints of each of the two issues above. Please write neatly in the booklet provided.
This paper should contain an appropriate level of sophistication and critical thought.
Your responses will be graded by an independent source.
Appendix Q

Critical Thinking Prompt MK 311, April 2012

“Critical Thinking” Prompt for Mk 311 (spring 2012) Professor DeSimone
Thursday, April 26 2012

1) Are you a participant in one of the experiential incubator projects? Please circle
   Yes    No

2) Critical Thinking is defined by Wikipedia as “purposeful reflective judgment concerning
   what to believe or what to do”. On a scale of 1 -7, based on the lectures, assignments, and
   text readings so far, do you believe the MK 311 Advertising course will improve your
   critical thinking skills, with one being the lowest and seven being the highest?
   1 2 3 4 5 6 7

3) Creativity (according to Wikipedia) refers to the phenomenon whereby a person creates
   something new (a product, a solution, a work of art) which has some sort of value. On a
   scale of 1-7, based on the lectures, assignments and text readings so far, do you believe
   that the MK 311 Advertising course will improve your creativity, with one being the
   lowest and seven being the highest?
   1 2 3 4 5 6 7

In an article titled Advertising: “The Poetry of Becoming” by Theodore Levitt the author
puts forth the following comments about advertising

1) “Everybody knows, without help from Ralph Nader, that commercial
   communications are not engineering descriptions of the real thing. Nobody wants to
   hear that a perfume is a complex concoction of extracts from the lining of the mollusk
   and urine from the civet cat, or needs to be told it performs certain practical functions.
   As with many utilitarian products, people seek not just what they deliver
   operationally but also (perhaps especially) what they promise emotionally or suggest
   symbolically. In much consumption we are motivated by hopes greater than what we
   can deliver reasonably, by wishful possibilities that go beyond the ordinary and
   transcend reality. In response to such motivations, advertising supplies exactly what
   the painter with an easel supplies, not simple photographic reproductions”.

2) “Actually, advertising is the least harmful form of propaganda-precisely because it is
   so conspicuously in the service of its source, the sponsor. It is effective on behalf of
   the advertised product precisely because the sponsor exists to assure the customer of
   the reliability and credibility of his or her promise, because the sponsor is visibly,
   eagerly and reliably there to stand behind the product, to give customers the assurance
   they need to buy in the first place”.

Please critically evaluate separately in the booklet provided at least two different sides or
viewpoints of each of the two issues above. Please write neatly in the booklet provided. You will
have exactly 20 minutes. This paper should contain an appropriate level of sophistication and
critical thought. Your responses will be graded by an independent source,
Appendix R

Research Prompts MK 420, Spring Semester 2011

Spring 2011 Research prompts

Beginning of the semester Prompt

February 23, 2011

Mk 420 – Strategic Marketing

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!

1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.) economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.
Appendix S

MK 420 Syllabus – Spring Semester 2011

Wagner College
Spring 2011
Strategic Marketing MK 420
M/W 9:40 to 11:10
Room Campus Hall 208

Professor: Frank DeSimone


Course description: To provide an overview of Strategic marketing. Lectures and text material will include evaluating markets, segments and customer value for strategic planning purposes. The course will also cover designing, developing and implementing market driven strategies using cases studies and real world application.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Content</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed Jan 19</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Mon Jan 25</td>
<td>Lecture- Strategy</td>
<td></td>
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<tr>
<td>Wed Jan 26</td>
<td>Zoo/ Outline</td>
<td></td>
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<tr>
<td>Mon Jan 31</td>
<td>Zoo /Outline</td>
<td></td>
</tr>
<tr>
<td>Wed Feb 2</td>
<td>Chap 4</td>
<td>Pick Teams</td>
</tr>
<tr>
<td>Mon Feb 7</td>
<td>Analyze/Research Zoo</td>
<td></td>
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<tr>
<td>Wed Feb 9</td>
<td>Chap 5</td>
<td></td>
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<tr>
<td>Mon Feb 14</td>
<td></td>
<td>Imax Case study</td>
</tr>
<tr>
<td>Wed Feb 16</td>
<td>Chap 6</td>
<td></td>
</tr>
<tr>
<td>Mon Feb 21</td>
<td>No Class</td>
<td></td>
</tr>
<tr>
<td>Wed Feb 23</td>
<td>Teams</td>
<td></td>
</tr>
<tr>
<td>Mon Feb 28</td>
<td>Chap 7</td>
<td></td>
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<tr>
<td>Wed Mar 2</td>
<td></td>
<td>eHarmony</td>
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<tr>
<td>Mon Mar 7</td>
<td>Spring Break</td>
<td></td>
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<tr>
<td>Wed Mar 9</td>
<td>Spring Break</td>
<td></td>
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<tr>
<td>Mon Mar 14</td>
<td>Chap 8</td>
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<tr>
<td>Wed Mar 16</td>
<td>Teams</td>
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<td>Mon Mar 21</td>
<td>Chap 9</td>
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<td>Wed Mar 23</td>
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<td>Mon Mar 28</td>
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<tr>
<td>Wed Mar 30</td>
<td>Chap 10</td>
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<tr>
<td>Mon Apr 4</td>
<td>Teams</td>
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<tr>
<td>Wed Apr 6</td>
<td>Chap 11</td>
<td></td>
</tr>
<tr>
<td>Mon Apr 11</td>
<td></td>
<td>Team Progress report</td>
</tr>
</tbody>
</table>
Goals and objectives

1) Begin the process of “thinking Strategically”
2) Apply the basic concepts of marketing to develop marketing driven strategic approach
3) Learn to apply the current marketing situation of the S.I, Zoo to the strategic outline and to the concepts included in the text and lectures.
4) Learn to prepare advanced written case study analysis
5) Using the materials presented in the text, lectures and from experiential activities, to prepare and present a group strategic presentation.
6) Specific talents to be reinforced through course activity are critical thinking and Creativity enhancement.

Teaching Philosophy

Students learn through a combination of traditional means like textbook reading and class lectures, but they learn in a deeper way when they practice applying their knowledge to a particular experiential project. In this class, 80% of the grade will be established through 4 written case studies and the student’s active and productive participation in the SI Zoo project/incubator.

Some other guidelines regarding the “learning by doing” teaching philosophy include

1) Class attendance and an exchange of ideas are critical to the development and implementation of strategic marketing. Absences and lateness will be negatively reflected in the class participation grade, and lack of preparation and application in the experiential part of the course will be negatively reflected in that part of the grade.
2) You are expected to read and reflect upon the text materials before the class. You are also expected to make generous reference to the text and/or lectures in all of your written case studies.
3) The base of differentiation in this field is the application of critical thinking and creativity in the development and execution of your plan.
4) While 4 classes are completely dedicated to “team time” It is likely that students will need to supplement this time by meeting outside of class and/or specifically traveling to the Zoo

Assignments

Attendance/class participation 20%
4 written Cases (10% each) 40%
Experiential project
   Marketing work, written outline, preparation 20%
   Final group presentations 20%
Further explanation of grading

Written Case Assignments- Early in the semester, you will be given a chapter which outlines the preferred handling of a strategic case. These cases should be written using that outline as a guide, written professionally and succinctly, and be a minimum of 3 pages typewritten (12 font). Since we devote an entire class to the analysis of the case, late receipt of the case will not be accepted. Your grade will partially reflect the integration of text and lecture material into your analysis where appropriate. These four cases are worth 40% of your grade.

Experiential Exercise-It is currently planned that we will be doing a marketing and strategic exercise with the Staten Island Zoo. This is an opportunity for the student to learn how to apply the marketing and strategic theory, and hopefully improve critical thinking skills and application of creativity through the process.

Contact/Office Hours

Contact – Phone: 718-420-4491
Email: frank.desimone@wagner.edu

Office Hours: Campus Hall 216 (Please make an appointment)

Monday 2:30 to 4:00
Tuesday 2:30 to 4:00
Wednesday 11:30 to 12:30
Thursday 11:30 to 1:30
February 23, 2011

MK 420 – Strategic Marketing

Please respond to the following questions (prompts). Please answer neatly in the booklets provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study for my Doctoral research.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!

1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.) Economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.
May 09, 2011
MK 420 – Strategic Marketing
Please respond to the following questions (prompts). Please answer neatly in the booklets provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study for my Doctoral research.
Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth.
Where appropriate, include your core values about the topic.
You will have approximately 20 minutes to respond to all three questions.
Thank you for your participation!

1) How important do you think the clarity of your “sense of self” is to your ability to formulate and execute effective strategic marketing decisions?

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) Please discuss the impact of more general macro issues on the specifics of your strategic marketing plan and/or specific marketing promotional proposals. These general marketing issues might include upper management objectives, level of Bureaucracy of the organization, pace of the organization, level and type of employees, and overall budget constraints
Appendix V

Prompts for Monmouth University – Autumn Semester 2011, September

Tuesday, September 20, 2011
Monmouth University Entrepreneurship Program
Professor John Buzza

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.
Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.
You will have approximately 20 minutes to respond to all three questions.
Thank you for your participation!

1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.)economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.
Appendix W

Prompts for Monmouth University Autumn Semester 2011, December

Monmouth University Entrepreneurship Program

Professor John Buzza, Wednesday December 7, 2011

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions:

1. How important do you think the clarity of your “sense of self” is to your ability to formulate and execute effective strategic marketing decisions?

2. How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3. Please discuss the impact of more general macro issues on the specifics of your strategic marketing plan and/or specific marketing promotional proposals. These general marketing issues might include upper management objectives, level of Bureaucracy of the organization, pace of the organization, level and type of employees, and overall budget constraints.

Thank you for your participation!
Monday, February 06, 2012
Monmouth University Entrepreneurship Program
Professor John Buzza

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!

1) Please discuss the impact of the macroeconomic environment on strategic marketing. The macroeconomic environment today may include the state of the world (or U.S.)economy, unrest in the Middle East, rising oil and food prices, the U.S. budget deficit, and the current political situation in America.

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) How important do you think self-confidence, self-concept and/or self-esteem are to your ability to make effective strategic marketing decisions.
Appendix Y

Prompts for Monmouth University Spring Semester 2012, April

End of semester essay prompt

Monmouth University Entrepreneurship Program

Professor John Buzza

Please respond to the following questions (prompts). Please answer neatly in the booklets/papers provided. Do not put your name on the booklets or on this paper. These prompts are being independently evaluated as part of a research study, the results of which may be used for a published article.

Your responses should be thoughtful, clear, precise, relevant, and reveal your logic and depth. Where appropriate, include your core values about the topic.

You will have approximately 20 minutes to respond to all three questions.

Thank you for your participation!

1) How important do you think the clarity of your “sense of self” is to your ability to formulate and execute effective strategic marketing decisions?

2) How would you include ethics and social responsibility as part of your strategic marketing decisions? How important are your core values to the strategic decisions you make?

3) Please discuss the impact of more general macro issues on the specifics of your strategic marketing plan and/or specific marketing promotional proposals. These general marketing issues might include upper management objectives, level of Bureaucracy of the organization, pace of the organization, level and type of employees, and overall budget constraints
Appendix Z

MK301 Syllabus – Autumn Semester 2010

Syllabus for Consumer Behavior – fall 2010

Marketing 301-Consumer Behavior
Fall 2010
M/W 9:40 to 11:10
Spiro Hall 4

Professor Frank DeSimone

Text: Consumer Behavior, Tenth Edition, Schiffman, Kanuk

Course outline: A study of theories related to consumer behavior as part of the buying process. Topics include needs, attitudes and beliefs, and cultural, family and reference group influences.
Prerequisite MK 201-Junior or Senior standing

Course Objectives:

1) To learn in depth about the overall psychology of the consumer
2) To learn about consumer consumption of media
3) To gain a deeper understanding of yourself, so as to be able to apply and compare yourself as a consumer with other marketing demographics.
4) To gain a detailed understanding of the consumer purchase process.
5) Apply consumer behavior concepts creatively to practical marketing use through the use of exercises and case studies.
6) Succinctly express consumer behavior theories, ideas or practical application to the class.
7) Be able to select visual advertisements that express what is taught in theory.
8) Demonstrate the ability to apply text material to critical thinking and in creative depth

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
<th>Assignment</th>
</tr>
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<tbody>
<tr>
<td>Mon Aug 30</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Wed Sept 1</td>
<td>Chap 1</td>
<td></td>
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<tr>
<td>Mon Sept 6</td>
<td>Labor Day</td>
<td></td>
</tr>
<tr>
<td>Wed Sept 8</td>
<td>Chap 4</td>
<td></td>
</tr>
<tr>
<td>Mon Sept 13</td>
<td>Chap 4</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>Wed Sept 15</td>
<td>Chap 5</td>
<td></td>
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<td>Mon Sept 20</td>
<td>Chap 5</td>
<td>Exercise 3</td>
</tr>
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<td>Wed Sept 22</td>
<td>Chap 6</td>
<td></td>
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<tr>
<td>Mon Sept 27</td>
<td>Chap 6</td>
<td>Exercise 3</td>
</tr>
<tr>
<td>Wed Sept 29</td>
<td>Chap 7</td>
<td></td>
</tr>
<tr>
<td>Mon Oct 4</td>
<td></td>
<td>Verbal Midterm</td>
</tr>
<tr>
<td>Wed Oct 6</td>
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<td>Verbal Midterm</td>
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Mon Oct 11       Fall Break
Wed Oct 13       Chap 8
Mon Oct 18       Chap 8       Exercise 4
Wed Oct 20       Chap 9
Mon Oct 25       Chap 9       Exercise 5
Wed Oct 27       Chap 10      Case Study 2
Mon Nov 1        Chap 11      Case Study 2
Wed Nov 3        Chap 12      Case Study 2
Mon Nov 8        Chap 13
Wed Nov 10       Chap 3       Case Study 2
Mon Nov 15       Chap 14
Wed Nov 17       Chap 14      Case Study 1
Mon Nov 22       Chap 15
Wed Nov 24       Thanksgiving
Mon Nov 29       Chap 15
Wed Dec 1        Verbal Final
Mon Dec 6        Verbal Final
Wed Dec 9        Reading Day
Mon Dec 11       Final Written Exam

Assignments/Grading

A summary of the Grading will be

Class participation/preparation and attendance    20%
Exercises (written)                                20%
Cases (Written)                                   20%
Verbal Mid-Term and Final                         20%
Written final                                     20%

Class participation/preparation and attendance

All students are expected to have read the textbook chapter assigned prior to class. Since this is a
course about consumers, and we are all consumers, class participation is essential to the full
understanding of the topic. Since class participation is important to the class, attendance is part
of this grade category. If any student misses more than 2 classes, a half grade will be lost for
each absence above 3. If any students are involved in sports and will need to miss a class due to
the game, they must hand in the game schedule early in the semester. This is worth 20% of your
grade.

Exercises

The best way to learn is by actually doing exercises to learn. You will be given a series of 5
exercises to perform. You must do each exercise but will be graded on the two of them you elect
to write and submit. They will be worth 10 points each. The grading will be based on your
creativity in performing the exercise, and what you were able to learn from the exercise, and how well you were able to express what you learned to the class for applicability. All written materials are to be type written and given by hard copy in the class. Late papers and email cases will not be accepted unless given prior approval. A portion of the class will be selected to present their selected advertisement to the class for discussion.

**Cases**

One way to evaluate the ability to apply what you have learned is through case study. The case studies in this text are very short. You are to be prepared to discuss the case studies assigned for each of the classes as designated in the schedule above. However, you are responsible to hand in two case studies in writing for grading purposes. They will be worth 10 points each. All written materials are to be type written and given by hard copy in the class due. Late papers and email cases will not be accepted unless given prior approval.

**Verbal Midterm and Final**

It is critical that you are able to express yourself clearly about a range of marketing subjects. I will give the class questions for preparation, and they will be responsible to answer those questions in class without notes. This is more like a true business meeting! You will be graded based on your command of the topic in the question, and your ability to demonstrate an understanding by using relevant examples.

**Final Written Exam**

This assignment will explore your ability to take three topics of interest to you from the textbook, and to write about it in more detail. For example, you may update the topic through research, disagree/agree with the topic through creative expression or example, and use personal experience to provide a unique perspective on a topic or visually build on a topic beyond what the text has written. You will be graded based on your creativity and depth of thought. You should use two typewritten pages per topic as your guide. A list of potential successful topics is attached.

**Special Note:** If you have a disability for which you maybe requesting an accommodation, you are encouraged to contact both your instructor and Dina Assante, Associate Dean, Center for Academic and Career Development, Union building, 718-390-3181 as early as possible in the semester.

**Contact and Office hours:**

Office: Campus Hall 216
Office Hours: Mon/Tues/Wed 2:45 to 4:15, Thurs 12:00 to 2:00
Phone: 718-420-4491 (X4491 within school)
Email: frank.desimone@wagner.edu
Appendix AA

Entrepreneurial Course Syllabus

Monmouth University
School of Business Administration, Department of Marketing and Management

Course Outline- Entrepreneurship BM 498

Professor John S Buzza
buzzaernonmouth. edu
732-263-5575
732-263-5576 732-751-1701

Prerequisites:
Successful completion of 64 or more credits-junior standing.

COURSE DESCRIPTION

This undergraduate course focuses on the actual tasks and activities of the entrepreneur, from the excitement of the original concept to the reality of researching venture feasibility, financing the venture, and ultimately launching the venture. The course will lay the foundation for the entrepreneurial approach and perspective of managing a business.

The purpose of this course is to examine the various approaches to the process of Entrepreneurship. We will also examine the series of tasks that must be performed well to ensure the success of ANY entrepreneurial venture.

The course will use text and real world cases to investigate the entrepreneurial process, beginning with an idea and evaluation and ending with harvesting wealth and distributing value. Projects may include a team start-up, venture evaluation and presentation, a research paper and or writing case studies.

Be prepared to work very diligently in this course. You must commit many more hours than might be the norm. Your effort is as important as your results. This class is all about WORK ETHIC.
Methodology

Each semester, the Entrepreneurship class, consisting of approximately 35 students, collectively decides to start an actual business from its conceptual stage to its product introduction. The students are mailed well before class starts to be prepared to bring to class the first day at least two viable ideas for a business start-up. These ideas are all categorized as to their probability of success (by the professor) and then presented to the class. The class will vote on which business they would like to start and the process begins. It must be noted that this business is not conceptual, but a real live business using seed money from a University account designated for Entrepreneurship. Once the business is decided upon, the class is separated into various departments necessary to run the business. These departments consist of Marketing and Advertising, Sales, Research and Development, Web Site Design., Production, Administration and Accounting. We ask for volunteers but the Professor looks to match student's majors with business responsibilities (i.e. accounting major- Accounting Department). We then appoint department heads, which become the nucleus for the Executive Board which will meet once a week as a group outside of class. The first two classes are devoted to developing a Business Plan which adds additional responsibility for each student. During the first several classes (initial planning stages), assignments are given to get the students motivated about the business and more importantly -to give them a sense of their commitment (above and beyond a normal 3 credit course) that is needed as we move forward.. Each department is given a set of responsibilities each week and they must complete and report back to the rest of the class (through their department head) with no more than a 5 minute presentation. This presentation by the various departments emulates a traditional Board Meeting and gets the student's familiar with many things, not the least of which is being responsible for their part in the big picture. No department wants to be deficient in their assignments, as the peer pressure from their classmates can. at times be quite pressing. We set benchmarks as part of our Business Plan and the students either reach those benchmarks, or realize why they did not. We relate this to corporate America and why companies sometimes miss their targets and become deficient in their planning. The lessons learned during this segment of the course become invaluable to students upon graduation.

We try and emulate a true corporate America type culture. This is what most students will experience upon earning their degree, so the familiarity with this structure is very significant.

As the course takes shape, so does the business. Depending on the good, product or service, we always try and initiate a product launch sometime near the end of the semester. We do this by formal initiation to the entire University family starting with the Board of Trustees, the President and Provost, Faculty, Administration and of course the students. At this product launch, we have a brief presentation by the company CEO. The CFO also makes a short presentation on our current financial position and projections for the future. The balance of the evening is dedicated to networking I want our students to introduce themselves to anyone that might be able to help them upon graduation. We have had MANY success stories where students have secured interviews and contacts that have eventually culminated in full time positions. Everyone attending is very interested in the student's responsibilities and accomplishments. Since we now have a full fledged, ongoing business what happens next? It now becomes the responsibility of the Small Business Management class. We take the current business and move it to its new confines in Small Business Management. We run a similar program, breaking up the class into departments but our efforts are now focused more on growth rather than
development. We become very opportunistic during this class, using the ideas and intuitions of the students and try to capitalize on their enthusiasm. We continue to have Board meetings and we can truly measure accomplishments accordingly. This stage of the business, and what this course is dedicated to, is to solidify the product so as to insure its viability in the marketplace for years to come. We network exclusively with outside contacts as much as possible who can help our students with product development.

**Learning Objectives:**

- Be able to evaluate business opportunities and risks, using analytical tools
- Understand the need for sound financial management in the entrepreneurial environment
- Understand how to obtain capital financing, both from the entrepreneur's and the investors perspective
- Become aware of the emergence of Entrepreneurship as a leading economic force
- Develop interpersonal skills relating to human characteristics and personality traits
- Develop communication and presentation skills
- Have the ability to make decisions (team projects)
- Have the ability to solve problems (case studies)
- Develop research skills for analysis of case studies and supplemental research on current events
- Develop computer skills for optional use in case studies and team project

**Audience**

The "inside" audience is comprised of students that either have or want to have some future in the business world. The significance of this course is that whatever talent the student possesses; he can fine tune his abilities and see how his/her efforts coordinate with others in an atmosphere of teamwork. Each student is pushed to their individual limits in terms of time and effort in this course. They come to the realization that their abilities can be stretched and truly have no limits to their potential. Students are made aware of all the departments within a business that they might never before considered interesting prior to working in such a corporate-like environment.

As far as the "outside" audience, we try to find a niche market that seems to present the best opportunity for success. Once again, the students are the ones that make the decision, with the help and guidance of the professor.

**Grading**

I understand that you face many demands of other courses, job related requirements and social and family obligations. However, I also appreciate that you have selected this class to learn, and get as much as possible out of the course. Here are the "rules of the game" so that you understand the grading criteria.
A. Class participation will constitute 20% of your final grade. During one class you will be expected to present and analyze a case from the text. Those not presenting will be expected to contribute and critique.

B. You will become a team member and as such will receive a grade for your team project. However, individuals may receive + or — points based on their team contribution.

C. A good deal of weight will be placed on your progress and improvement over the semester, without penalizing in any way those who may start out and sustain an outstanding effort.

D. Weight of course Grading Segments:

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Class Participation and Attendance</td>
<td>20</td>
</tr>
<tr>
<td>Mid-Term</td>
<td>20</td>
</tr>
<tr>
<td>Team Project &amp; Presentation</td>
<td>25</td>
</tr>
<tr>
<td>Case Presentation</td>
<td>10</td>
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<tr>
<td>Final Exam</td>
<td>25</td>
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<td>Total</td>
<td>100</td>
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</table>

**Project Outcomes and Results**

A. Since its inception, the Entrepreneurship class at Monmouth University has started 7 different businesses, three of which are still viable and thriving in a competitive marketplace (the 4 other were started strictly as one semester businesses). Our first venture was a business called Monmouth Boxes, where we produced gift boxes (not baskets) for the holiday season. The second was a business that centered on a discount card that was sold to Monmouth students and the local community. It was earmarked to promote local businesses that wanted to establish a relationship with the University. For our third venture, we became a production company — Bluehawk Productions — and produced an "Oldies Concert" featuring Joey Dee and The Starlighters and Larry Chance and The Earls. After that, we worked with a chef that had a recipe for pasta sauce and developed an entire business for him and his facility, Naninas in the Park (www.naninas.com). An additional success story associated with this venture is that one of our students has secured a six figure position as the Director of Operations with Naninas and has employed many Monmouth University students in both part time positions and internships. Our next foray was helping one of our former Entrepreneurship students (he was the Marketing Director for our gift box business) start his own cheesecake company — "Rompos Little Cheesecakes". I am proud to say he is still in business with various accounts and is currently working on a mega contract with Shop Rite. Last semester, we started what could be our biggest success story to date. The students initiated The Better Baking company (www.betterbakingcompany.com) that is in the process of producing all natural, all organic, trans fat free snack cakes (similar to Devil Dogs/Twinkies). I am again proud to announce that in addition to many small to medium sized health food stores and retail operations, our product has been purchased and accepted by the Toms River School Systems (upwards of 20,000 students) and the Long Branch School Systems (4,000 students). Next semester (MR '07) we are taking the Better Baking Company and placing it in our Small Business Management class and
the prospects for success are unlimited. Profits from our business ventures return directly to the University so that the Center for Entrepreneurship is a self-funding entity.

B. The course combines all of the elements found in the business world, namely the venture creation, financing, marketing, strategic management, negotiations, ethics, etc. The course features actual real-life case studies and includes experiences from my professional business career. Upon completion of this course, you will have learned what and how entrepreneur's think and will be able to apply these concepts to your own business situations. The course covers the entrepreneurial process of a business from inception, to implementation, to management and, ultimately, to the realization of it's profit goals. The course examines the attributes of entrepreneurs, their search and analysis of business opportunities, and the assembling of their entrepreneurial teams that allow them to eventually become successful business people. Upon completion of the course, you will have a full understanding of the real problems that entrepreneurs face. Some are successful by overcoming these problems and by examining this problem solving process, you will be able to grasp the techniques involved in order to become successful yourselves. Your presentation skills, which are so important for success in the business world, will be utilized to their fullest since a major portion of your grade will be based upon your class participation and your team presentations. Your team and interpersonal skills will be utilized by the formation of a new entrepreneurial venture. Your grade will not only be dependent on your individual presentation of your area of responsibility, but also, on the total cohesiveness of your team presentation. Finally, I truly believe that at the end of the course you will realize that this has not only been one of the most interesting courses you have taken, but also one of the most valuable to your future success in business. The tools you will come away with from this course will enable you to compete in the new business world.

**Relation to College Mission:**

We will work together to investigate, understand and internalize the process of becoming a successful entrepreneur and running a successful business.

**Weekly Class Schedule**

<table>
<thead>
<tr>
<th>Topics/Readings/Assignments</th>
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<tbody>
<tr>
<td>Introduction</td>
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<tr>
<td>Entrepreneurs and Entrepreneurship, the Context of Entrepreneurship (Case Assignments to Be Determined)</td>
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Researching the Venture's Feasibility
Planning the Venture
Organizing the Venture
Launching the Venture
Mid-Term Examination
Managing Process
Managing People
Managing Growth
Review of the Business Plan
Other Entrepreneurial Challenges, Evolution of e-business
Team Presentations
Preparation for Final Exams
Final Examination

ACADEMIC INTEGRITY POLICY:
"Academic dishonesty subverts the University's mission and undermines the student's intellectual growth. Therefore, Monmouth University will not tolerate violations of the code of academic honesty. The penalties for such violations include suspension or dismissal, and are explained more fully in the Student Handbook." (Monmouth University 1998-2000 Undergraduate catalog, page 57). Specifically, students are responsible for reading and understanding the following sections in the Student Handbook: Academic Policies (page 119), and Student Code of conduct (pages 173-192).

REGISTRATION POLICY:
Any student who has registered for this course without either (1) completing prerequisites as itemized in the most recent version of the Monmouth University Undergraduate catalog, or (2) receiving permission prior to registration from both the departmental chair and School of Business Dean/Associate Dean, will be subject to administrative withdrawal, which will occur prior to the beginning of the third week of classes.
Appendix BB

Sample Radio Script for Casale Jewelers

Casale Radio script (first cut)

Husband: Honey, what are doing with that pile of old jewelry on the dresser?
Wife: Oh, I was looking through all my stuff to see if I could find something to wear to Joanie and Bob’s Anniversary party
Husband: Why do you keep all of that stuff, anyway?
Wife: What am I going to do with it, throw it all out? This piece was left to me when Aunt Jenny died, my grandmother got this piece for me when I was 18, and this one is from my first boyfriend, Tom
Husband: Maybe you should have stayed with him! Anyway, Casale jewelers has a unique service where you bring your old obsolete jewelry to them and they work with you to customize and create new pieces that you would want to wear?
Wife: How does that work?
Husband: Phil’s wife went there the other day. She brought a pile of jewelry like you have and she wound up coming home with a beautiful customized necklace, and an ankle bracelet. She even came home with a few dollars in her pocket!
Wife: How is that possible?
Husband: The new owner, Cory Schifter and the on-site jeweler sits with you, assesses the value of your jewelry, and then works with you to create customized pieces that you would really use. They can make money on the jewelry you trade in, and you wind up with jewelry you will actually use!
Wife: How do I know I am getting a good value? Do you want to come with me?
Husband: You don’t have to worry about the value. I know Cory Schifter from the Si Chamber of Commerce and from a number of Charity events. He has a great reputation as a fair and creative guy, and the Jeweler is supposed to be a magician. But if you want me to come for my creative input, I would be glad to join you.
Wife: Thanks, but I think I’ll go with my sister. I think she also has a drawer full of obsolete jewelry too!
Announcer: Make an appointment to visit Cory and the Magician at Casale Jewelers on 1639 Richmond road. Call 718-351-8300 or visit the site at www.casalejewelers.net. Casale jewelers is “Truly Unique”
Evaluation Form for Capstone Course BU 400

WAGNER COLLEGE
CONFIDENTIAL

HOST ORGANIZATION EVALUATION
-FOR ACADEMIC CREDIT-

STUDENT______________________________________________ SEMESTER___SPRING 2013_____

ID #___________ E-MAIL
ADDRESS____________________________________________________

ACADEMIC DEPT. BUSINESS ADMINISTRATION FACULTY SPONSOR: PROF. FRANK DESIMONE__________

ORGANIZATION NAME & ADDRESS______________________________________________________________

SUPERVISOR'S NAME:
____________________________________________________________ SIGNATURE:__________________________________

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<td>2.</td>
<td>QUANTITY OF WORK</td>
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3. DEPENDABILITY
4. MOTIVATION
5. ANALYTICAL/Critical THINKING SKILLS
6. WRITING SKILLS
7. RESEARCH
8. ORGANIZATIONAL ABILITY
9. CREATIVITY
10. ATTITUDE TOWARD WORK
11. ATTITUDE TOWARD CO-WORKERS
12. ATTITUDE TOWARD SUPERVISOR (S)
13. OPENNESS TO CRITICISM/SUGGESTION
14. ABILITY TO LEARN NEW TASKS
15. MATURITY
16. ABILITY TO WORK WITHOUT SUPERVISION

17. WHAT ARE THE STUDENT’S GREATEST STRENGTHS?
________________________________________________________________________
________________________________________________________________________

18. IN WHAT AREAS DO YOU SEE NEED FOR IMPROVEMENT?
________________________________________________________________________
________________________________________________________________________

Please return this form to
Wagner College

PROF. FRANK DESIMONE, DEPARTMENT OF BUSINESS ADMINISTRATION
One Campus Road, Staten Island, NY 10301 Email:frank.desimone@wagner.edu

Fax: 718-420-4274

Office phone: (718) 420-4491