DESIGNING AN ELECTIVE COURSE ON GELOTOLOGY

by

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Abstract

The purpose of this capstone project was to design a course description on gelotology, the study of laughter, at a XYZ Institute. The course provides a detailed analysis of the background of gelotology, how the course was designed and how to put the course into application at the capstone site. The course was designed using a sample curriculum as a template provided by XYZ Institute. Four theories were used to support the design of the course on gelotology, the Humor Processing Theory, Kurt Lewin's theory of unfreezing, changing, and refreezing, the relief theory and the tension release theory. The format of the course proposal used a syllabus as a template provided by XYZ Institute. The syllabas served as a model to propose an elective course to introduce the concepts of gelotology to medical students. The content learned can help students to reduce their stress by teaching them stress-coping mechanisms to use while in college. One can apply this information in the workplace by training medical professionals how to use laughter to improve their patients' health. The course description can submitted to college administrators as a recommendation for a new elective course. The human side of caring for patients is often times lost. The course description on gelotology educates participants on using laughter approaches that can bring the human side of caring for patients back into the medical field. The principles learned throughout the course include the growing body of research conducted by Norman Cousins, Lee Berk, Patch Adams, and Madan Kataria. The intent was to submit the course description (GS200) introduction to gelotology to XYZ Institute. The proposal was to add an elective course as part of the curriculum for medical students.

Foreword

The development of this capstone project came about due to the stress I have in my life. In 2009, I was in a car accident that severely injured my back. This forced me to take a medical leave from my employment. At the completion of my medical leave, I was not able to return to work and therefore, I was terminated by my employer. At this point the saying *when it rains it pours* became a reality in my life. I was unable to maintain my rent, faced eviction, creditors were harassing me, my health started to deteriorate, and depression started to enter into my life.

At one point, I began to take low dosages of anti-depressants. In an effort to avoid depression I reached out to family and friends to support me as I recovered and attempted to return to work. Knowing my stress level, a friend of mine Jonathan Baker, invited me to attend a health conference that he felt would motivate and teach me ways to deal with life's daily struggles. I hesitated attending the health conference. However, my friend convinced me that I could learn some valuable information to change my life.

It was at this conference where I attended a workshop on *laughter yoga*. The practice of laughter yoga is a unique exercise. The principles of yogic breathing and laughter are used to reduce stress and improve individuals' overall health. Attending the workshop for the first time felt unusual because it involved laughing without any reason. However, I left the workshop feeling less stressed. I immediately felt the effects of the laughing and began to research laughter yoga on my own. I then discovered there were free laughter clubs all over the world. I found a local club and started to attend the free weekly sessions. After each session, I felt relaxed and less stressed.

During one session, the facilitator informed members interested in learning more about the concepts of laughter yoga, that there were options available to get certified in the technique. I

found interest in learning more because my health was improving and I was at a point where I no longer needed anti-depressants. I attended a two-day training that educated me on the principles of laughter yoga. I learned about the background of laughter yoga created by Madan Kataria, the effects of laughter and how it boosts the immune system, the history of (gelotology) the study of laughter, numerous studies and research conducted by Lee Berk, Patch Adams, and Norman Cousins. In addition, I learned how to facilitate laughter yoga sessions. The research amazed me even more. When I learned the certification could be used to teach others, I took it upon myself to share my experiences using laughter yoga at health, education and business conferences.

I later had the opportunity to learn more through advanced training by Madan Kataria and Vishwa Prakash. At the five-day workshop, I learned about scholarly research and an advanced approach to using the techniques of laughter yoga. The training provided me with more background on laughter as a therapy and has inspired me to continue researching its affects on reducing stress. Enrolling in Capella's Doctoral program, I was eager to research this even further. Upon joining the Capstone program, I decided to develop a professional product that related to something I have had an interest in. One of Kataria's goals is to have laughter programs in colleges. I then decided, I would help this mission by reviewing the research on gelotology and designing a one-of-a-kind course that could be offered as an elective for a college.

Acknowledgments

Without the guidance of my mentor Dr. Bruce Francis and faculty member Dr. Elena Kays, I would not have completed program. From the start, they believed in my project, no matter how odd it may have sounded. I proved the importance of my project and, despite the many detours to completion, they were always there to steer me back in the right direction.

The motivation for wanting to pursue my Doctorate in Educational Leadership started in my early years of attending public school 223 in Jamaica, Queens, New York. The first time I heard of a doctorate was the day I saw the principal, Dr. Margaret Bradley, wearing a cap and gown that looked like no other gown that I had ever seen. She stood with confidence and greeted all students as we entered the building. She instilled in us the importance of getting an education. At this time, I was too young to understand what this meant.

In high school, I had a teacher Dr. Walker; his confident demeanor instilled in his students the importance of getting as much education as possible. If a student mistakenly called him Mr. Walker, he would stop class and lecture on how hard he worked for the title *Doctor*. It was through these numerous lectures that I learned what a doctorate is and how important it was to obtain as much education as I possibly could.

I would also like to acknowledge a lifelong friend, Dr. Latoya Trowers-Bell. I recall countless nights seeing her in the office working on her doctoral degree. I always called her *super mom* because she worked full time, had two children, and was working towards obtaining her Ed.D. Having a conversation with her about how she found the time to work on her degree also motivated me. Last but not least, I would like to thank my mom Maurene Haynes and Dad Eugene Bolden. They laid the foundation that inspired me to pursue education and never give up, no matter how many times I wanted to. These are the main reasons why I am enrolled in

Capella's doctoral program. The path to success is not a straight line. I am glad I have the

support of family, friends, and mentors to guide me through completion.

Table of Contents

List of Tables

List of Figures

SECTION 1. BACKGROUND

Benefits to Educational Leadership and Management

Gelotology has a role in health improvement for many years. Most of its significance in the health field was unrecognized. Today the growing body of research has led to the development of a capstone project that relates to the specialization and proves that gelotology can have an important role in the allied health field. The course design is relevant to the specialization in leadership and management because leaders must address problems and develop innovative solutions. According to Steinberg (2016), every day we must change, innovate and re-think learning. Amazon, Google, and Apple are companies that have used this approach to become successful. Companies in any industry can become successful if they follow this method. The gelotology course is an example of change by offering something new and innovative. The course is built upon existing practices and the course re-thinks learning by its interactive exercise which is different than traditional courses.

Today, businesses thrive on innovation; in a competitive market, it is innovation that is the key to an organization's survival. Almost every year various companies strive to be on top. To be number one and gain as much market share as possible, a company must constantly seek new ways of conducting business. The design of a course on gelotology is an example of thinking outside of the box and thinking innovatively in a rapidly changing world. The course on gelotology is innovative because it is something new and different than the traditional courses offered at the college. The assignments, lesson plans, group work, and class activities; are designed to create a unique course that educates students on a practice that is not offered in many colleges.

Designing a course will also apply literature-based practical strategies to find solutions to specific localized problems encountered in practice. Unfortunately, the XYZ Institute has few elective courses listed. Also, the student's interest level in elective courses is diminishing, and the courses hold no value in the student's profession. According to Ting and Lee (2012), several authors cited the importance of offering elective courses of interest to students. The more interest students have in the content, the greater the impact on student learning. Students often ask faculty and administration if there are other elective courses to choose. Without options, students are forced to take courses not related to their profession (e.g., a paralegal student may take a medical terminology elective course with no interested in the allied health field). When the level of interest is low, the student will see no value in the course.

The course design also supports the specialization in education in leadership by educating medical students on alternative health practices that are easy to ignore. According to Morreall (2014), education is supposed to be preparation for life. It should foster the intellectual and personal attributes needed to be a successful, well-rounded human being, but traditional education either ignores or actively suppresses one of the most important of these attributes – humor. The new course on gelotology includes humor and provides students with new tools to help cope with stress.

The Need for a Gelotology Course

Laughter therapy is a something that can be taught to medical students. According to Dolgoff-Kaspar, Baldwin, Johnson, Edling, & Sethi (2012), instructors can be certified through Laughter Yoga International. The founder of the organization, Dr. Madan Kataria trains individuals in the laughter therapy principles (Dolgoff-Kaspar, et al 2012). After students

complete the course on laughter yoga, they can pursue more education about the program to enhance their skills.

The new course will expand knowledge and inform practice within the specialization through scholarly inquiry and critical analysis in the area of gelotology. Also, students will learn a new skill in a collaborative space and gain new knowledge to apply to their profession and personal lives. The new course would teach students leadership abilities by helping students to learn how to design programs on gelotology.

Developing a new course can help bring about change within academia and the allied health field. According to Grogan, Donaldson, and Simmons (2007), leaders who can challenge accepted methods have the most chance of promoting learning for their members. Taking the initiative to identify problems and develop solutions shows a leader's ability to take action and solve complex problems. The course on gelotology is a practice that more nurses need training on as laughter therapy gains recognition in the allied health field.

Historical Background

"Yoga" is derived from a Sanskrit root word 'Yuj' (join), hence "yoga" means and includes, joining of the body, mind and the 'Self'(soul)" (Setty, Pailoor, and Mahadevan, 2016, p. 89). Yoga promotes self-knowledge and understanding.. Having this understanding will allow the individual to cope with the daily stress of everyday life. Through its practice people have been able to live a more refreshing life, filled with happiness and good health. As an exercise yoga has been able to help heal the body and reduce stress. Galantino, Bzdewka, Eissler-Russo, and Holbrook (2004) conducted a pilot study of participants with lower back pain. Results found that participants experienced a decrease in disability and stress; and an increase in flexibility. Over time yoga has transformed into an exercise that originated from ancient rituals.

Yoga is a practice that many have used for centuries. The history of yoga dates back to ancient religious text that describes techniques of yoga. According to Kumar and Aanand (2015), it is believed to have originated in India. Some date yoga back 3000 years. Ancient stones show carvings of people in yoga poses. Many years ago, it was believed that people worked long hours and needed time to rest. The rest allowed their bodies to relax and regain its energy. As people rested in these ancient times, they discovered the harmonious effects of sitting still. The mind body and soul connection became a tradition that many used as a way to remove themselves from their busy lives. While there are many different forms of yoga. The most popular categories of yoga divided into four broad sections the vedic period, pre-classical, classical and post-classical. Each of these periods has evolved over time changing yoga into many different forms.

Today, the United States became one of the biggest markets for Yoga. The recognition of yoga received attention, the United Nations General Assembly has declared June 21st International Yoga Day. People all over the world celebrate this day by honoring the traditions that have been practiced for centuries. The actions of yoga help to reduce stress and improve the mind body and soul through relaxation. As yoga developed over the years, new forms of yoga were created.

Gelotology is a term coined in 1964 by Edith Trager and William Fry. The practice was formed from the Greek root gelos (to laugh) Butler (2014). Madan Kataria, a general practitioner in India, coined the term laughter yoga in 1995 while researching an article he was writing for a health magazine (Kataria, 2002). Kataria began the first laughter club at a park in Mumbai, India, and these laughter clubs have now spread worldwide. Laughter yoga combines laughing with the yogic breathing exercises used in yoga. What makes laughter yoga different is that it involves laughing followed by periods of meditation. There are no jokes, humor or comedy used.

Research has found that the body does not know the difference between real laughter and fake laughter. Kataria developed this concept to trick the mind into happiness. The process of fake laughing releases endorphins into the blood stream causing a chemical reaction to reduce stress. Kataria's movement is established through the development of free laughter clubs. Participants attend the free clubs to laugh, learn about gelotology and reap the health benefits of the saying *laughter is the best medicine.* According to Khatchadourian (2010), Kataria concentrated his energies on promoting the therapeutic and health benefits of his exercises. The works of Kataria started in India and have now spread worldwide. According to 'Yoga,' (2011), laughter yoga is practiced in 60 countries.

In India, Kataria conducted exercises in maximum security prisons, at schools for homeless children, and at institutions for the blind. He encourages his acolytes to share laughter yoga in similar venues. According to Butler (2014), Fry published studies of the physiological processes that occur during laughter supporting the claim that laughter is equivalent to exercise. Wagner, Rehmes, Kohle, and Puta (2014) conducted a study comparing the activation of trunk muscles during laughter yoga in comparison to exercises such as crunching and back lifting exercises. Results found that during the highest intensity of laughter yoga, the action of the laughter was comparable to those produced by traditional exercises. Therefore, not only is laughter yoga a great method for stress reduction, but it is also a form of physical exercise.

Corporate and Private Sector Laughter Programs

As this growing body of research has gained more recognition, other researchers have begun to incorporate the principles of gelotology. Spitzer (2006) provided several examples of organizations that have incorporated the principles of laughter in the medical field:

5

Clowning in hospitals is not a new development. Several centuries ago in Turkey the Dervishes, who were responsible for the wellbeing of patients, first fed the body then used their performance skills to feed the soul. The September 1908, issue of Le Petit Journal had on its cover a drawing of two clowns at work in a children's hospital ward in London. More recently, Patch Adams, as a young doctor in the 1970s, began clowning for hospital patients in Virginia, USA. Big Apple Circus established the Clown Care Unit in New York City in 1987 as the first structured hospital clown program, with frequent and regular visits to host hospitals. (Spitzer, 2006, p. 534)

Corporations have also taken part in the concepts of gelotology. "Companies ranging from online retailer Zappos.com ("create fun and a little weird-ness") to Southwest Airlines ("fun-luving attitude") have made playfulness part of their corporate cultures. Google Inc. is perhaps the paradigm for blending work and play" (Alsop, 2010, p. 50). More corporations are now investing in changing their worksites into fun workplaces. However, these companies have large budgets to invest in organizational development. The creation of a college-level course will help to educate more of the general population. The certification in laughter yoga would allow students to use the concepts in any work environment. After completing the course, students will be able to start laughter programs at hospitals, clinics, and businesses. Any company could now invest in better understanding the concepts of laughter therapy.

In the United States, many gelotology practitioners have taken this concept to senior centers, universities, gyms, and into medical settings, such as the cancer wards at Swedish Covenant Hospital in Chicago, and at Massachusetts General Hospital in Boston. This movement continues to grow as Kataria now conducts corporate training and has developed training courses to certify individuals in his research. The design of a college course on gelotology would ensure anyone obtaining a degree in the medical field is educated on the effects of how laughter therapy can benefit society.

Organizational Context

The XYZ Institute for which this course is being developed is a for-profit, medical school accredited by the Accreditation Council for Independent Colleges and Schools (ACICS). The College offers the Associate in Applied Science (A.A.S.) and the Associate in Occupational Studies (A.O.S.) degrees. The college has three campuses located in two northeastern states. The programs offered are Medical Assistant, Licensed Practical Nursing, Massage Therapy, Paralegal Studies, and Business. Each degree program requires completion of 60 to 72 credit hours depending on the program. The average program completion is 16 months, and classes run in an 8-week cycle. The college has a multicultural student population serving students from the ages of 18 – 40+. The capstone project will be conducted only at the urban campus in a large metropolitan city in the Northeast. The student population at this campus is currently 95% African American females with an average age of twenty-eight. The course on gelotology being proposed; would be a great program to offer the unique and diverse body of students at the XYZ Institute.

Many of the students at the XYZ Institute enter with academic deficiencies and personal problems that contribute to the schools' dropout rates. According to Black, Terry, and Buhler (2015), the amount of students that start college do not continue beyond the freshman year. Therefore, the XYZ Institute has to make it a priority to retain students past the freshman year. Students at the XYZ Institute are enrolled in a career preparation program with specific technical requirements. Many of these students at the XYZ Institute are using government grants or a variety of student loans. The students who attend the XYZ Institute have busy lifestyles with multiple responsibilities. The stress of their personal life sometimes has an effect on their academic performance. According to Bland et al. (2014), some authors have found that college

students are assaulted by numerous and constant personal, educational, and social stressors. Specific stressors or challenges include, but are not limited to, interpersonal relationships, living arrangements, personal finances, more frequent experiences of failure, and important career decisions. As a result, the course on gelotology would be a great teaching tool to help students to mitigate these problems.

Developing new initiatives to improve attrition and retention rates is essential for student success at the XYZ Institute. Black, Terry, and Buhler (2015) stated the importance of developing various initiatives to address first-year student concerns. The XYZ Institute has implemented interventions such as revising curriculum requirements for new students and requiring the completion of a freshman seminar course that teaches students time management skills, ways to avoid procrastination, and study skills. The XYZ Institute has also implemented initiatives such as extended tutoring hours, access to confidential counselors, and mandatory faculty office hours. According to informal verbal feedback from students, these previous interventions have not been effective enough to reduce student stress or increase retention. Student retention and stress are still a major concern at the XYZ Institute. According to XYZ Institute student catalogue (2016), the college achieved a rate of 60% for the 2013 – 2014 academic year. Administration revealed that the majority of student dropout during their freshman term.

The development of a new course based on gelotology can offer a useful alternative to help students to deal with stress. In addition, the students can take what they have learned and teach others. Treymayne (2014) describes the benefits of humor for patients and nurses. It has been found that nurses should consider the use of laughter as a method to improve patients' health. Moscaritolo (2009) describes the results of a study conducted by Ulloth (2002); the study

found that humor decreased nursing students stress and anxiety. It is suggested that contemporary nursing use laughter therapy which can result in better patient care. The development of a course on gelotology would help teach contemporary nurses the importance of using laughter therapy to help their patients. The XYZ Institute would be one of the few colleges that offer a course that certifies students in this unique concept.

There are a limited number of schools that have courses that focus on the research of Norman Cousins, Patch Adams, Madan Kataria, Lee Berk and others that have studied gelotology. According to the literature review for the capstone, because the rise in student cost to attend college has risen so drastically in the past ten years, for-profit institutions are under extreme political pressure to ensure students who enroll in these schools are completing the degree program. Colleges have a responsibility to devise plans to improve retention (Wimshurst, Bates, & Wortley, 2003, p. 12).

The XYZ Institute is under political pressure to retain their students. Laughter Yoga is one option that can help alleviate student stress and enhance their learning. McLaughin (2015) stated there is a growing body of research that indicates how the use of humor contributes to increased student learning. Also, laughter builds relationships and improves peer communication. Heisserer and Parette (2002) stated that students' feelings of not fitting in are closely related to student attrition. Feelings such as not belonging, feeling rejected, and not being able to adjust to normal academic challenges play a factor in a student's ability to complete academic programs. With stress being a factor that affects first-year students, the XYZ Institute is under political pressure to devise innovative strategies to address problems with student attrition.

A course on gelotology is an innovative idea that educates students on new methods of stress reduction. Also, laughter yoga has been found to improve bonding and academic performance. Ayan (2009) stated that cheerful people have a lighthearted interaction style that builds social support. In an academic environment a laughter program can improve bonding among students; in a professional environment, laughter can improve bonding in the workplace.

Magnusn and Barnett (2013) examined the effects of playfulness in a study consisting of 898 students from three universities. It was found that students tolerate stressful situations better when playfulness plays an active role in their personality. Currently, the XYZ Institute has a limited amount of student activities. Without activities it is possible students will have higher levels of stress. Lindsey, Fabiano, and Stark (2009) found that one in four college students are depressed and that depression affects their daily activities. It is important that XYZ Institutes offer student activities to engage students, reducing stress and increasing student academic performance. Klem and Connell (2004) stated the importance of student engagement and its effects on academics. The more the student is engaged; the higher the chances a student has in being academically successful.

The XYZ Institute student population consists of a diverse body of students: recent high school graduates, transfer students from other colleges, and students who have been out of school for long periods of time. Transitioning into a new environment can be challenging for students. They enter the college with stress and therefore it is important that the XYZ Institute further engage students with activities. Conley, Travers and Bryant (2013) state the importance of student engagement for first-year college students. Their study revealed that providing a psychological wellness seminar for first-year students has beneficial results for students to better

10

manage their stress. A course on gelotology is not only educational but is also an activity that engages students while they learn.

Theoretical Framework and Change Theory

The development of an intervention to teach students stress coping techniques is an innovative approach enabling change at an XYZ Institute. Kurt Lewin's change theory of unfreezing, changing, and refreezing relates to this action research study because continuous quality improvements are needed for organizations to address problems and become more efficient and productive (Burnes, 2004); moreover, Lewin shows that organizations have to unlearn old methods before adopting new methods. First, Lewin's unfreezing method – the unlearning of old methods – would occur by presenting research to convince the XYZ Institute administration to try something new such as a laughter intervention before midterm week. Second, the change method – adopting the new methods – would occur through inviting a volunteer-certified gelotology instructor to lead the laughter intervention one week before midterms. Finally, the freezing method – solidifying the new methods - would occur through adding this new laughter intervention as part of the XYZ Institute's academic improvement plan, thus making laughter intervention a programmatic part of the XYZ Institute's procedures.

Sigmund Freud is known for the works conducted on the relief theory. The theory relates laughter to built-up pressure; when we laugh, we let off steam, thus reducing stress (Beard, 2014). According to Restak (2013), the tension release theory is described by the way a joke is told. Once the joke is understood the laughter releases negative emotions that helps a person to feel better. Restak also states the meaning behind what Charles Darwin calls tickling of the mind. Laughter is a psychological trick that can change a person's mood. Laughing at stressful

situations can cause chemical relations on the body thus changing negative feelings positive. The course on gelotology incorporates all of the theories by bringing students together in groups to laugh. Students will learn how laughter stimulates endorphins to help reduce stress. According to Knackmuns (2014) a study was conducted using humorous and non-humorous lectures. The humor group outperformed the non-humor group. In 2010 the Humor Processing Theory (IHPT) was coined to prove that laughter enhances education and is an effective tool in academia. The affects of laughter does not only enhance education it can also help to reduce stress.

Gelotology Relationship to Stress

Student stress continues to be a problem at colleges. Innovative ideas are needed to address the problem. The development of a new course to use laughter therapy would help solve the XYZ Institute's problems while at the same time making student learning more fun. According to Foster (2015), laughter yoga is a tool used in the classroom as a result of the instructor herself taking a course on laughter yoga. Also, laughter yoga is used to give students brain breaks. These types of breaks are a new idea that needs to be studied to bring about change at the XYZ Institute. Other colleges may see the benefits of a course on gelotology and expand their programs as well. According to Schnell and Doetkott (2002-2003), freshman seminar courses date back to the mid-1800s. It was not until 1911 that the Carnegie Foundation suggested colleges *do something to help freshmen find themselves*. As a result, many colleges today now offer freshman seminar courses to new students. It is the goal of the capstone project to help educate administrators, faculty and policy makers on the importance of gelotology as a course to help reduce student stress, improve patient quality of life and further engage students.

According to the literature review for the capstone, (2014) often stated times freshman year is the most stressful for college students. Stress can have an impact on a student's decision to

continue or drop a program. Students have to determine whether or not they can handle academic stress. Ruberman (2014) stated that

> [i]n an effort to cope with their stress, students make use of their inner strength or that of the adults, friends, parents or teachers who offer them help. Others may seek help from a local practitioner, typically someone whose practice sees students having difficulty making it through college (p. 104).

Freshman stress has an impact on retention, graduation rates, and dropout rates. Students should have various resources available to them before making decisions to withdraw from a program.

Coping with stress is something first-year students have to expect when transitioning to college. According to Ernest and Dwyer (2010), "[r]esearchers analyzing the issue of freshman retention have concluded that the departure rate is caused largely by academic and social stressors encountered by students as they attempt to adapt to the college environment" (p. 888). Colleges need to be aware of these factors and develop interventions to address these concerns. Howard (2015) argued that

> [t]o nip stress before it leads to bigger problems, a growing number of schools, including New York University, Harvard and the University of Missouri, are offering training in meditation and mindfulness to quiet the tendency to worry about all sorts of potential catastrophes.

Addressing student stress early on can help students to learn coping mechanisms as they transition into college life and the medical field. The University of Santa Clara implemented a meditation course to address student stress. According to Howard (2015), the students that completed the eight-week class reported greater reductions in stress than those who did not take the course. The course on gelotology also incorporates some of the principles of meditation, which is an added benefit for students taking the course. A portion of the course includes

teaching students meditation techniques also, students will be introduced to silent meditation and reflecting on what they have learned.

Studies on Laughter

According to the literature review for the capstone, Beckman, Regier, and Young (2007) studied the concept of laughter yoga developed by Madan Kataria, who conducted research on the medical effects of laughter. For fifteen consecutive workdays, Kataria led a fifteen-minute laughter program with thirty-three employees from a behavior health center. There were no jokes, humor or comedy. Participants were guided through fake laughter until the laughter became contagious and eventually turned into real laughter. The study results revealed a laughter program was a simple and effective way to build resilience against burnout, set healthier boundaries, and focus on self-care. Also, participants were better able to cope with stress and the pressures of daily work routines.

Nasr (2013) describes several studies that were conducted using laughter therapy. In each case participants who used laughter therapy improved their health. One study included seventeen healthy persons aged twenty-three to forty-two. Participants watched a 30-minute comedy video and results revealed improved cardiovascular function. Another study revealed a higher natural killer (NK) cell increase after watching something funny. One of the most interesting studies, consisting of 53,000 adults in one country in Norway, indicated an increase in the odds ratio of surviving by seven years. Those who exhibited a lower sense of humor had a less ratio of survival rate. Dunbar et.al in Nasr (2013) described how hearty laughter leads to pain relief. Endorphins as an analgesic are released into the body which allows the body to tolerate pain better. The results revealed that, after a laughter session, pain tolerance increases. Nasr (2013)

also described how Norman Cousins was able to tolerate pain better after watching the television

comedy featuring the Marx Brothers. Cousins in Nasr (2013) stated

> I made the joyous discovery that 10 minutes of genuine belly laughter had an anesthetic effect and would give me at least two hours of pain-free sleep… When the pain-killing effect of the laughter wore off, we would switch on the motion picture projector again and not infrequently; it would lead to another pain-free interval (p. 22).

The course on gelotology would teach some of these concepts to participants.

Laughter in Academia

It is the goal of the capstone to incorporate these same principles within academia and the

allied health field. The same effects can help college students, nurses and anyone wanting to

reduce their stress. Martin in Rizzolo (2009) stated "While yoga can decrease stress, humor can

be a stress modifier as well. The use of humor to help reduce stress has received increased

attention by both health care providers and the general public because of its psychological and

physiological benefits." Johnson (2005, p. 91) examined how laughter is an important part of our

lives that is with us in the beginning stages of our lives (e.g., the playground), follows us in the

classroom, and stays with us in the workplace.

Laughter helps to build relationships of many kinds: child-child, child-adult, and adult-

adult. Therefore, laughter should not stop at a young age; even adults need to incorporate

laughter into their lives. According to *USA Today*, the average five-year-old laughs 300 times a

day while the average adult laughs only fifteen times a day (cited in Deck, 2003). Incorporating

fun activities can help adults to increase the number of times they laugh per day. Deck (2003)

uses fun activities to gain her students' active attention. A course on gelotology would train

students how to activate learning in others while at the same time helping reduce stress levels.

Berk, an associate research professor of pathology and human anatomy at the School of Medicine, Loma Linda University, conducted a study with sixteen healthy, fasting males. Study results revealed participant decreases in stress hormones cortisol and catecholamines, concomitant with positive mood state changes, all resulting from watching humorous videos. The laughter associated with the study assisted in reducing stress (Berk, Tan, & Berk, 2008). The details of the study can be taught to students, allowing them to educate their patients on the importance of reducing stress while recovering from illnesses. Students themselves can also apply the practices learned in their personal lives. The course on gelotology is not only about teaching others, but participants themselves can also use what is learned throughout the course.

Significance and Impact

Stress has a direct effect on student health. It is important that students recognize academic stress and how it impacts their health. According to Ying and Lindsey (2013, p. 437), college life presents a unique developmental period during which many individuals adopt lasting health behavior patterns that are either associated with enhanced health status and longevity or increased long-term disease risks.

By focusing on health practices initiated in college, health professionals can assist students in sustaining these behaviors over their lifetime. According to King, Singh, Bernard, Merianos, and Vidourek (2012), a sample of 485 college students at a Midwestern university completed a survey on acute stress management techniques. A majority of the students participating in the survey had high levels of stress. Half of the students reported benefits from using stress management techniques. The implications of the study revealed the importance of developing interventions that aid in reducing student stress. King, et al. (2012), stated that "[i]f incoming students do not receive cues to using stress management techniques, then

16

opportunities for stress management interventions and increasing the frequency of stress management techniques are missed. In turn, stress levels may increase, and more students would be faced with academic pressures beyond their control and drop out" (p. 200)

It is important for first-year students to learn coping mechanisms. Having this skill will help students to reduce their stress and complete their academic programs. Murphy in Schnell and Doetkott (n.d.) examined freshman seminar courses and found they have an impact on student retention. The link between freshman seminar courses and a course on gelotology can teach students to stress coping mechanisms thus improving their academic performance.

The literature review for the capstone describes the study of laughter in recent decades, laughter's effect on stress and how gelotology has gained the attention of physicians, philosophers, and the media. In 1979, Norman Cousins wrote a book entitled *The Anatomy of Illness*, describing his recovery from ankylosing spondylitis, a form of arthritis that affects joints in the body. His treatment regimen consisted of daily laughter and massive doses of vitamin C. These popular beliefs have prompted more scientific research showing evidence of improved health by simply laughing. Patch Adams was widely recognized after a movie *Patch Adams,* a true story that depicted his life. For thirty years this physician studied how fun, joy, love, humor, creativity, and community have an effect on healing (Adams, 2000). As a physician and a professional clown, Patch Adams created the first silly hospital that focused on health care through the use of fun and laughter. A silly hospital is defined as a hospital that uses the principles of laughter to improve patients' health. According to Tener, Lang-Franco, Ofir, and Lev-Wiesel (2012) within a hospital trained medical professionals to wear clown costumes and help remove the anxiety of patients through the use of laughter. A course on gelotology would

cover a majority of the research conducted by others who have studied the effects of laughter to improve health.

The Royal College of Nursing, as discussed in Tremayne (2014), acknowledged the importance of using humor to enhance job satisfaction. Nursing is a stressful position which has many physical, mental and emotional demands. Incorporating humor is one way to help relieve these barriers. Macdonald (quoted in Tremayne, 2014) outlined that, for nurses to be effective and deal with stress, time needs to be made for fun and laughter, not only with patients but also with colleagues and peers.

The development of a course will allow more medical personnel to be trained and certified in laughter yoga. Introducing this concept within the workplace can help improve the quality of life of patients. There are limited programs that teach laughter therapy; teaching nurses the methods of laughter therapy can help reduce their workplace stress. Also, taking the trainer course will allow nurses to pass on the knowledge learned from the course. Also, the course may motivate others to pursue careers as clown doctors.

Need for Laughter in the Classroom

Englert (2010) demonstrated the importance of incorporating laughter in the nursing classroom. His research found that humor is not a new concept. The practice of laughter is underutilized needing more research in the medical field. Englert also found that incorporating humor in the classroom can be challenging. The instructor will need to research resources and ensure the content is not offensive to students. Therefore, the development of a course on laughter yoga could be more effective because there are no jokes, humor or comedy; the laughter is contagious, and this form of humor eliminates the chance of offending others.

Each laughter session works through fake laughter that eventually turns real. Restak (2013) examined a laughter exercise where he sat across from another person; he found that when one person started laughing, the partner would start laughing as well within a few moments. Despite the fact that nothing was funny, Rastak found at the completion of the session an improvement in his mood. A course on gelotology provides the instructor with the tools needed to facilitate a laughter program without offensive content. Also, creating a college level course will help to promote gelotology, so it is no longer underutilized in society.

Clown Doctors

Clown doctors are now part of hospitals. Taylor (2014) examines the Clown Doctors of New Zealand, a charity which aims to help patients to cope with their treatment while they recover in hospitals. The program has shown a direct effect on patients' health and has helped the nursing staff as well. Taylor (2014) gives an example of a child who struggled with walking because of pain in his legs; laughter therapy reduced the child's blood pressure and helped him walk again. Taylor (2014) gives another example of two clown doctors encouraging a child who was not responding to traditional medical practices. Therefore, doctors needed to devise alternative solutions. The doctors encouraged the child to walk again, using their sense of humor and clown wardrobe. Before the clown doctors arrived, the child did not want to attempt walking because of the pain from recovering from two broken legs. The clownish presentation seemed purely for fun. However, the clowns were helping to motivate the patient to recover. The child walked the whole length of the 30-meter corridor as the two clown doctors moonwalked backward for every step the child took.

The power of clown doctors motivates patients to do things they may not want to do. These motivating effects have a direct result in improving the quality of life of patients.

19

According to Leef and Hallas (2013), the results of a study examining the effectiveness of a sensitivity training clown workshop revealed that professional schools should teach the principles of clown care to nursing students. The study was conducted with 131 baccalaureate nursing students. Their study revealed that 80 percent continued to apply the principles of engagement and that 92 percent reported rendering nursing care with an *open heart and open mind* (Leef & Hallas, 2013). The statistics prove the importance of the effects of developing a program to educate medical staff on the techniques of gelotology. Also, the study revealed that nursing faculty supports the concept of using humor as an educational tool.

International Laughter Programs

The development of these types of programs has now spread around the world. According to Spritzer (2006), there are now many hospital clowning programs around the world—Theodora Foundation (Europe, South Africa, Hong Kong, and Belarus), Le Rire Médecin (France), Die Clown Doktoren (Germany), Payasospital (Spain), Soccorso Clown (Italy), CliniClowns (Europe), Doctors of Joy (Brazil), Fools for Health (Canada), and Humor Foundation (Australia). Laughter should no longer be frowned upon for use in health improvement or education. Though there are various terms used to describe laughter such as (gelotology, laughter therapy, humor therapy, laughter yoga over the years it has now become recognized and studied with scientific rigor. According to Gordon (2012), only in the twentieth century did philosophers and other theorists begin to fully appreciate the value of laughter and humor for human beings.

Based on the insights of thinkers such as Dewey, Freud, and Wittgenstein, we now know that humor can be both consistent with good education and with sound philosophical discourse. Foster (2015) found there is a link between laughter and creativity. The more you laugh, the

more creative you are when solving problems. A course on gelotology will help to add to the growing body of research on this topic.

According to Moggach (2009), participants of a laughter yoga session conducted at the Cape Primary School stated the positive results of taking a laughter yoga class. Various teachers were questioned after a laughter yoga session, and their comments revealed the importance of using laughter in education. Participants stated the following after their first session:

> "I was unsure about how it was going to go," admits reception teacher Bav Patel. But, giggling, she says the session reminded her how vital laughter is for a happy school environment: "For a school to work, you need to laugh." She was also reminded of the importance of laughter in effective learning. "If you're relaxed, you can tune in. It helps you to focus" Year 3 teacher Maxine Foulkes adds: "It releases inhibitions you may have – you start off tight and, as time goes on, you relax" Reception NQT Emma Aylett reveals that the session helped her get to know colleagues. And laughter is a useful learning aid, she adds – so why not model happiness in the classroom? "It's important not to be serious all the time, as you get a better bond and relationship" Yvonne explains that laughing clears the mind: "It releases endorphins and makes you more open to things. It is the feel-good factor when you have had a good laugh. Let's face it; you do not get one very often (Moggach, 2009, p.12).

Educators find value in laughter yoga, and this is one of the main reasons to design a college course to educate others on this topic. According to Perry (2005), laughter clubs have grown to 1,800 clubs in India and 700 other countries around the world. Kataria, the creator of laughter yoga, is also the founder of World Laughter Day (the first Sunday in May), when yoga leaders, teachers, and participants plan events to spread laughter: public laughing flash mobs in central locations where not only children but also adults partake in this celebration. It is a joyous occasion in which the public gains knowledge and awareness on the concepts of laughter yoga.

Health Improvements as a Result of Humor

Dolan in MacDonald (2004) stated that laughter is like *aerobic humor and internal jogging for all of the major organs*. Laughter stimulates the immune system which can help the

body to improve health. Hassed (2001) found that laughter can improve inflammatory disorders, asthma, cancer, and heart disease by reducing the physiological stress response. Berk (1989) conducted a study and found that participants in laughter groups demonstrated a *decrease in serum cortisol, dopac, epinephrine, and growth hormone levels, which lower the physiological stress response.* The course on gelotology incorporates group laughter techniques and allows participants to experience the effects of the laughter throughout the training program.

SECTION 2. PROCESS

Process to Design the Course

The process to design the course began with first understanding gelotology concepts. As a certified laughter yoga teacher, it is important to understand how to lead a group of people to laugh without using jokes humor or comedy. One of the most important concepts of laughter yoga is not using jokes. The researcher has seven years of experience in gelotology. Anyone practicing laughter yoga is expected to continuously research the topic and gain additional knowledge in this field of study. The best ways to gain additional knowledge include attending or starting a laughter club, getting certified in laughter yoga, and researching the field and learning as much as possible.

Becoming a laughter yoga teacher means having the skills to certify individuals to become laughter yoga leaders. These individuals have the ability to start laughter clubs and lead group member in typical laughter session. Becoming a Laughter Yoga Leader is the most basic level of training provided by the founder of laughter yoga, Madan Kataria. At the expert level of training as a laughter yoga teacher one can certify others because the individuals now have learned at an advanced level. Laughter yoga teachers can only be taught by Kataria himself or a selected handful of what are called master trainers. In 2011, the capstone researcher attended a 5-day workshop to become certified to teach laughter yoga. According to Kataria (n.d.), the training covered the following topics.

- Introduction to the concepts and history of laughter yoga

- Facilitating laughter yoga sessions

- Meditation practices

- Scientific research and studies on laughter

- How to start laughter clubs

- Organizing and preparing for public seminars

Each topic was helpful in designing the foundation for the course. For example, each section was reviewed and analyzed to design the weekly course outline. Information was obtained from each section to create weekly assignments, home works, and exercises to follow along with the textbook selected for the course.

When designing the course, it was also important to understand the college mission statement and institutional goals. The XYZ Institute has a mission to "provide quality career education and technical training to allow students of diverse educational, cultural and personal backgrounds to become successful in an ever-changing global economy" (History, mission and goals, 2015). The mission statement played an important role in designing the course.

The objective was to create a course that would adapt to the changing global economy. As the literature review revealed, the concept of laughter therapy has gained attention over the last few years. According to History, Mission and Goals (2015)

> To offer a well-rounded academic experience that combines professional education and liberal arts and sciences to better prepare our students for careers in a variety of professional fields in health and wellness, business and technology, digital media arts, and service to others, and for advancement to further higher education.

The mission was one of the most motivating statements that helped lay the foundation of the course.

The course on gelotology would introduce students to the field. Some students have never heard of clown doctors or nurses that dress up as clowns to improve the

quality of life of patients. The course is designed to combine professional education, liberal arts, and sciences. The course is designed to provide service to others and advancement to further higher education. Gelotology provides a service to patients, and the community by teaching students stress reduction techniques and better coping skills. Also, the course relates to higher education because students can pursue research in gelotology after graduation. They can gain additional training through the Laughter Yoga International website and can use the skills learned to train others.

Professional Product: Course Design

The product produced consists of an elective course on gelotology. Contents include a course outline, course objectives, course description, assignments, projects, course readings, suggested videos and a rubric. The course can be used as a *train the trainer* guide and also as a teaching tool for students interested in learning more about gelotology. The course was designed using a combination of three models. One model used is the industry standard for colleges that are accredited by (ACICS). According to ACICS (2010), the council was founded in 1912. It is one of the most respected and longest established national accreditors of academic institutions in the United States. The XYZ Institute is accredited by this accrediting agency and is required to design courses according to the agency minimum standards.

The second model was designed by the founder of Laughter Yoga International Madan Kataria. Any programs using laughter yoga must at minimum use the concepts learned by Kataria's level 1 training (see section on certifications). The third model was designed by the XYZ Institute syllabus which is the basis for designing a course. Also, the course was designed using the principles of Blooms taxonomy. The result was to revise the existing model and create

a course with enough rigor to meet the standards applicable to a college level course on gelotology.

Levels of Training

There are three levels of training. The capstone project will certify students on level 1 which is called *laughter yoga leader*. Level 1 teaches students the basic concepts of laughter therapy. Level 2, which is called *laughter yoga teacher,* trains individuals to certify others in the concepts of laughter yoga. Level 3 is the highest level of training available; it is called *laughter yoga master trainer*.

Level 3 participants are trained by Kataria, the founder of laughter yoga. Medical students can introduce the practice at their worksite and teach their patients. Hospitals have few staff members with knowledge of laughter therapy. Majzun (2011) stated the importance of gaining valuable information from pediatric hospitals. The same use of play as a healing tool can also be useful for adults as well. It is important for medical personnel to have more knowledge of these practices which can be beneficial to their patients.

Target Audience

The primary target audience for the capstone project is medical colleges that offer programs in health care, administrators such as chief academic officers, and students that plan on having direct contact with patients. Medical students are the primary target audience because based upon the literature review there is a need for nurses to learn more about the concepts of gelotology. However, because the course is designed to help students to reduce stress, the courser could be used in any field.

Product Design

The first step to designing the professional product began with taking a refresher course on laughter yoga. The course helped the researcher to get re-familiarized with all of the general concepts of laughter. The first time getting certified in laughter yoga, the researcher was a participant, and the focus was more on learning vs. facilitating. In taking the refresher course, the researcher was able to pay attention to the training from the perspective of a facilitator. Notes were taken throughout the session in detail. The notes were then analyzed to help develop a broad scope of how to incorporate the practices of laughter yoga in a college setting.

After completing the refresher course, it was determined that the training did not have enough rigor to be a sufficient college-level course. The original course only consisted of two days' worth of content. It does not include textbooks or any aspects that would meet a college-level course. As a result, the researcher determined that assignments, research papers, course readings, presentations and group work would need to be incorporated into the course to raise the level of rigor. For example, the original course includes Bloom's taxonomy however, it moves too fast through each domain.

Designing the revised course, allows the student to move through each domain at a slower pace. Using this method will allow the student to fully grasp the concepts before moving on to the next domain. For example, the original course shows a video on laughter without reflecting on what was learned. It is left up to the participant to determine from memory what was learned. The new course has incorporated an assignment that involves the completion of a handout. The handout provides an analysis of the content shown in videos. It also provides something tangible for students to reflect on.

Structure the Course and Content of the Project

A thorough review of various courses was researched online. The researcher made initial contact with the college dean to find out the structure of courses at the XYZ Institute. It was found that there was no formal structure. Currently, the XYZ Institute uses the syllabus as a template for new course submissions. To ensure the course meets the industry standard, the researcher reviewed the format of curriculums to meet (ACICS) requirements. According to ACICS (2010), a template was provided and used as a model to design the course. Below is the outline used to design the course.

ESSENTIAL ELEMENTS OF MODEL CURRICULA

I.   DISCIPLINE

II. CREDENTIAL LEVEL

III. PROGRAM INFORMATION

   A. Program Description:

   B. Program Objectives/Core Competencies:

   C. Program of Study:

        1. Concentration

        2. General Education

        3. Related Requirements (Career/Professional Development, etc.)

        4. Electives (Emerging Trends)

   D. Course Descriptions

   E. Upper-Division

   F. Prerequisites

IV. INSTRUCTIONAL RESOURCES/EQUIPMENT, RESOURCE MATERIALS, LAB EQUIPMENT

V. CERTIFICATION

VI. FACULTY QUALIFICATIONS

VII. PROFESSIONAL ORGANIZATIONS

From Essential Elements of Model Curricula, by ACICS, Copyright 2010 by ACICS Reprinted with permission.

Figure 1. Essential Elements of Model Curricula

Throughout the design process, each component was broken down into sub-sections. Each unit of the (ACICS) model was designed by addressing each component as it relates to the XYZ Institute. The discipline for the course falls under the allied health field as the XYZ Institutes primary focus is to prepare students to become (MOA) Medical Office Assistants and (LPN's) Licensed Practical Nurses.

To design the objectives of the course the researcher had to think with the end in mind, e.g. what exactly would students learn, what competencies would help students to meet the objectives. Notes were brainstormed on paper and the most relevant were selected. When designing the course outline, competencies were matched with the objectives based on the lectures and assignments. Also, the objectives were designed using Bloom's Taxonomy Figure 2.
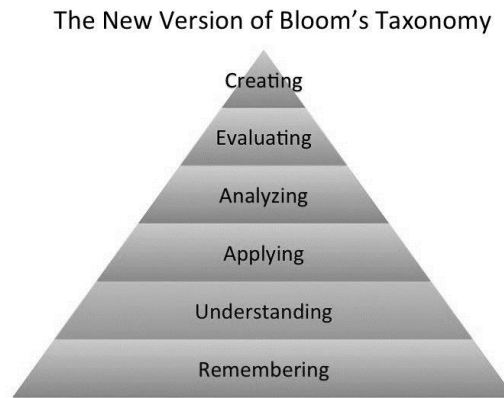
The New Version of Bloom's Taxonomy

Figure 2. Blooms Taxonomy.

From The new Version of Bloom's Taxonomy, by Andrea Hernandez, 2011, Flickr. Copyright 2011 by Andrea Hernandez. Reprinted with permission.

According to McNeil (2011) "The cognitive domain involves knowledge and the development of intellectual skills. The cognitive domain includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills" (p. 27). The chart below (Table 1) was designed to ensure the objectives of the course covered various cognitive domains of Bloom's taxonomy. An *X* was placed in each column that promoted one of the cognitive domains.

The following objectives were created:

Table 1. Bloom's Taxonomy checklist.

Course Obj. Num.	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
1	X	X	X			X
2	X	X				
3	X	X		X		
4	X	X	X	X	X	
5	X	X	X	X	X	X
6	X	X	X	X	X	X
7	X	X	X	X	X	X

The following describes how each objective uses Bloom's taxonomy.

1. Identify alternative techniques for reducing stress, boosting the immune system, and improving patients' health.

   The objective meets Bloom's taxonomy by the following cognitive domains remembering, understanding, applying and creating. The student will learn an alternative to improving patients' health through laughter. They must understand the concepts and analyze how what they have learned can be applied in the health field.

2. Identify and describe various terminology relating to gelotology.

   The objective meets Bloom's taxonomy by the following cognitive domains remembering and understanding. Students will learn medical terms and reflect their understanding and memory when discussing gelotology to others. The use of medical terms will be used to show rigor when learning about gelotology.

3. Identify and describe the works of Patch Adams, Lee Berk, William Fry, Madan Kataria, and Norman Cousins.

   The objective meets blooms taxonomy by the following cognitive domains, remembering, understanding and analyzing. The student will review videos, studies, documentaries and reading by the above researchers of gelotology. They must understand the concepts of the works of these individuals and analyze them for a better understanding of their work.

4. Critically analyze and evaluate journals and newspaper articles relating to Gelotology.

   The objective meets Bloom's taxonomy by the following cognitive domains remembering, understanding, applying, analyzing, and evaluating. The student will research various

scholarly journals and research studies relating to gelotology. They must understand the concepts of the studies, analyze how they can apply what was learned and evaluate the results based on feedback from their participants e.g. peers, patients, etc.

5. Demonstrate their knowledge and understanding of Gelotology.

    All of Bloom's taxonomy domains are used with this objective because at the completion of the course students will become certified in gelotology and should be able to teach and train others.

6. Demonstrate the ability to lead a laughter session in a group and individual setting.

    All of Bloom's taxonomy domains are used with this objective because the students will use all of the above objectives to prove they can lead laughter yoga session without instruction. The concepts could then be applied outside of the classroom.

7. Identify the health benefits of Gelotology.

    All of Bloom's taxonomy domains are used with this objective because through the above objectives students will understand all of the concepts of gelotology and apply them within their respective field of study. The students would use remembering, understanding, analyzing, applying, evaluating and creating change within healthcare with this new knowledge.

Structure of Course

The course was designed as an elective because the school currently has a limited amount of elective courses that interest students, e.g. many students complain about taking elective courses that do not relate to their major. Also, the chief academic officer of the college stated it

would be easier to approve an elective course through administration because all other courses would need to be approved by (ACICS) Personal Communication, 2015). The development of the elective course on Gelotology is an example of an emerging trend that will be interesting to students in their field of study.

The program description was designed by critically thinking about the objectives of the course and program outcomes as they relate to the school's mission and goals. The description was developed by summarizing the course and the main components the students would learn. It was also designed to create interest in the program of study, as it would appear in the course catalog. Since the course is an elective, it was determined there would be no prerequisite needed to take the course on gelotology. As long as students need electives to graduate this course would be open to all students.

The course combines the principles of yoga and laughter. One aspect of the course involves meditation. Therefore, it was determined that as part of the course student materials would include a yoga mat. The mat would be used during weekly exercises that include students meditating and laughing while lying down.

The textbook was selected because it provides the students with a full overview of the principles of laughter yoga. Each chapter highlights the concepts needed to understand fully gelotology and how to train others on its concepts. The textbook is formatted logically, and it includes illustrations for various learning styles. Another major reason behind selecting the textbook is due to the chapter on scientific research. The chapter provides an in-depth review of scientific studies on laughter. Also, the textbook was created by the founder of laughter yoga Madan Kataria. By using this textbook, it will ensure students are trained using the principles

developed by the founder. At the completion of the course, the textbook is a good resource for students to reflect on when they are teaching others the concepts of gelotology.

A review of the original laughter yoga program was reviewed and analyzed to help design a college-level course. e.g. the original program does not consist of research papers, homework assignments, or presentations. As an experienced educator, these components are traditionally a part of college courses. To help raise the rigor of the current laughter program the researcher designed assignments to a higher level of education using Bloom's taxonomy with the use of the cognitive process. The assignments were designed to help students develop original ideas that can be used in the field of gelotology.

Certification

The course includes a certification so that students can add skills to their resume. It will also serve as proof that students understand the general concepts of gelotology and have the skills to lead laughter programs at their worksites. Certification was also selected so that students interested in further researching gelotology could continue their studies by contacting the founder of laughter yoga Kataria. The organization is dedicated to continue training individuals interested in learning more about his research. Students can further their education only if they have completed a level 1 training course. The level 1 training is similar to what the course on gelotology would offer. Below are the levels of training and how students could further their education beyond this course.

Level 1: Laughter Yoga Leader (Certification for the course). The course was expanded from Kataria's 2-day training and made into a college level course. The certification teaches the student how to lead a group of people participating in a laughter yoga session. Level 1 is the most basic level of training used in laughter yoga. At this level it provides individuals

with the fundamental principles to guide others in laughter yoga sessions and trains them how to start laughter clubs. After completion at this level, individuals can move on to the next step, which is Laughter Yoga Teacher.

Level 2: Laughter Yoga Teacher: (Laughter Yoga Leader Prerequisite). A master trainer or Kataria are the only individuals that can certify individuals at this level. Kataria has frequent courses throughout the world. Level 2 is a 'train the trainer' course. In the certification, participants learn how to certify Laughter Yoga Leaders. The 5-Day training goes into depth on the principles of laughter yoga. Level 2 delves deeper into the principles of laughter yoga and meditation. Level 2 certification expands on what was learned at Level 1 certification. By completing this training, laughter yoga teachers can charge a fee to certify Laughter Yoga Leaders. Also, Kataria's method will allow participants to start businesses, speak at conferences, and use any aspects of Laughter Yoga at their disposal.

Level 3: Laughter Yoga Master Trainer (**Laughter Yoga Teacher Prerequisite).** Level 3 certification can only be conducted by Kataria. During this certification, participants receive one-on-one dedicated personal time with Kataria. Also, students will learn in detail about the levels of mediation and laughter yoga. Participants will work with Kataria during Laughter Yoga Teacher training and become among a limited number of Master Trainers. Level 3 is the highest level of training. According to Kataria (n.d.), the following criteria must be met to qualify for this training:

- Undergo a minimum of fifteen days training in Bangalore, India or other locations.

- The Candidate must be a certified laughter teacher at least for three years.

- Have conducted a minimum of thirty laughter leaders training and trained at least 500 leaders.

- Have inspired the commencement of more than thirty laughter clubs.

- Have a documented history of a minimum of 100 laughter yoga volunteer presentations.

Faculty Qualifications

The course was designed for anyone with teaching skills. The only suggestion is that the faculty member attends at least one laughter yoga session which can be found by visiting the website www.laughteryogainternational.org. The founder of laughter yoga has a site that allows individuals with no experience in laughter to attend free laughter clubs throughout the world. By attending one session, the faculty member would understand the general concepts to teach the course. By reviewing the text and watching videos on youtube, the faculty member would be prepared to teach the course. The second option is that the faculty member could attend a train the trainer course offered through the site. The school's budget could cover the cost of the training, and it could be used as professional development for the faculty member.

Last Step: Industry Experts

The researcher spoke with several industry experts that either has experience designing courses, have experience in academia and have experience in the field of gelotology. The advice provided helped the researcher to design a draft course on gelotology.

Several industry experts received a copy of the completed course in order to obtain their comments, feedback, and suggestions for improvement. Reviewer 1 has over ten years of experience in wellness and an MBA. He has been a keynote speaker and pioneer for the laughter yoga movement. Reviewer 1 was trained by the founder of laughter yoga. After a review of the

course, reviewer 1 had no feedback for improvement. The comments stated the course was effective for a college level elective, and the course outline was appropriate to educate individuals on the concepts of gelotology and laughter yoga.

Reviewer 2 has over ten years of experience in corporate training in the private sector. His comments were to explain in more details the information about Patch Adams. Otherwise, the content was sufficient at the college level.

Reviewer 3 has over twenty plus years of experience as a psychoanalyst and several years as a laughter yoga participant. The comments for improvement were to ensure participants understand that laughter yoga is not meant to humiliate or mock patients. The interviewee suggested the extra credit assignment be revised not to include asking strangers for signatures. Also, a revision was suggested regarding when to teach students how to lead laughter sessions. It was also suggested to push back this activity a few weeks. Students would be better prepared to lead laughter yoga sessions.

Describe Your Plan for Evaluating Your Project

The evaluation plans will consist of surveying students throughout the course. Before conducting a laughter session, students will answer questions regarding how they feel before the session and compare the results after a laughter yoga session. The surveys help students to understand the value of how laughter changes their moods.

As part of the course, students will be assigned critical thinking assignments, research papers, presentations, and demonstrations. Each assignment will be graded using the school's grading scale. Students will receive a grade which will assess the students understanding of the content. Examples of content are home works, research papers, laughter yoga group exercises, journal and video analysis.

Grading System

Table 2 *Grading Scale at the College*

Grade	Description	Value
A	93.000-100.000	4.00
A-	90.000-92.999	3.70
B+	87.000-89.999	3.30
B	83.000-86.999	3.00
B-	80.000-82.999	2.70
C+	77.000-79.999	2.30
C	73.000-76.999	2.00
C-	70.000-72.999	1.70
D+	67.000-69.999	1.30
D	63.000-66.999	1.00
D-	60.000-62.999	0.70
F	UNDER 60	0.00

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Based upon the grading scale (Table 2), passing the course on gelotology requires 60% or above, for students in the LPN program passing the course requires an 80% or above.

SECTION 3. APPLICATION

In designing the capstone project, it was important to develop a professional product that would be innovative and help to bring about change through its application at XYZ Institute. The contributions of this capstone project will bring about change to the following audiences: the institution, students, the allied health field and the workplace.

The Institution

As part of the XYZ Institute mission statement and institutional goals, it is important for the institution to focus on continuous academic and service improvements for the 2015-2016 academic year. As per the Chief Academic Officer (personal communication, 2015), the goals for 2015-2016 can be met by continuous change and innovation. Examples include improving each department, developing new courses, evaluating student programs and providing high service expectations as the XYZ Institute evolves into a service orientated industry. Partnership for 21st Century skills in Nachowitz (2014) stated the need for innovative ideas that can be sold in the marketplace. The ideas presented can lead to the rise of a new class of workers which have the skills to engage in complex problem solving; have a great deal of independent judgment and high levels of education.

Partnership for 21st Century skills in Nachowitz (2014) described the skills needed for success include creativity and innovation skills, critical thinking and problem-solving skills, communication and collaboration skills. The professional product developed uses Bloom's taxonomy cognitive domains as part of the design process, e.g. remembering, understanding, applying, analyzing, evaluating and creating. Utilizing the domains helps ensure students develop skills to meet these demands. Bloom's taxonomy is a framework that can be used to

determine the expectations of the learning process of students. According to Davis (2013), for students to be academically prepared they need to access and remember credible information, then develop an understanding of the content in a meaningful way. Next students would analyze other situations and challenge themselves to use the new knowledge learned.

Problem Described

The design of the new course helps the institution review new content and innovative ideas that may bring about change. The XYZ Institute uses the faculty it hires as industry experts. Committees are developed to review and revise course content. As one of the faculty at the XYZ Institute, the design of the new course is a suggestion to help meet the needs of students as observed by the researcher. The problem is that the institution has limited elective courses that interest students. As a faculty member that teaches freshman students, often students complain about the elective courses offered by the college. Seeing this as a problem led to the development of a new course to address the students complaints about the current curriculum. The changes that would occur consist of the following:

1. An additional elective course
2. An innovative course of interests to students
3. A unique course that is not offered at other colleges
4. New knowledge to medical professionals as part of a growing body of research
5. A one of a kind course offering that may attract new students
6. Educate students on new career choices
7. Additional content to be added to the students' portfolio

What is most important is that the new course will create a change to the institution by offering a one of a kind course that is not offered at other colleges. As the literature review indicates, there

is a lack of nurse education in the field of alternative therapies such as gelotology. The course

can help to attract new students seeking to learn more about laughter and how it can help

improve the quality of life of patients. 'Academic Programs' (2014) states the importance of

institutions to maintain and achieve financial success. The XYZ Institute should stimulate new

endeavors, encourage academic departments and faculty members to plan new course offerings,

organize meetings to encourage new ideas and align programs with the institutional mission. The

results can have an impact on the financial success of the school.

By continuous improvement, the XYZ Institute will build its brand of keeping up with

the changes in healthcare and academia. According to Papandrea (2014), Mount Ida College

used a different approach to branding by highlighting its academic programs vs. the institution as

a whole. The development of a new program will allow the XYZ Institute to market its new

program to new students and possibly use this new approach to branding. O'Brien and Deans in

Ting and Lee (2012) stated the importance of students being more diverse within their education.

Employers prefer graduates who have diverse skills vs. being too narrow and focused on their

majors. Electives give students the opportunities to learn additional skills which can make them

more marketable when they are seeking employment. The approval of a new course on

gelotology would allow the XYZ Institute to teach students new skills that help to enhance their

skills and their portfolios. Students are awarded certificates at the completion of the course,

which could also be placed into the student's portfolio. The XYZ Institute has a requirement that

students have a completed portfolio before starting their internships. Adding this content to the

students' portfolios will allow them to show others and reflect on what they have learned in

gelotology. According to d'Erizans and Bibbo (2015) After the term is over, students typically

take the contents they have learned and either dispose of it or place the items in storage. Without

much thought or reflection, the student does not realize how the content could be used to enhance their education. Providing students with a tangible item such as a certificate; the students could save the document electronically or store the item in their professional portfolio in one central location with easy access.

Benefits to the Allied Health Field

The development of an elective course on gelotology helps to improve the allied health field by teaching nursing students additional skills to help improve the quality of life of patients. Sometimes medicine alone is not the solution to healing the sick. According to Pressman and Cohen (2005), despite Self-help books, popular magazines, and Sunday newspaper supplements that have suggested that positive affect (PA) can improve people's health, a search of PsycINFO revealed there are twenty times more studies on depression vs. happiness and health. There is a need for continued research and education on other alternative therapies such as gelotology and laughter yoga.

The effects of laughter yoga have improved the quality of life of patients. According to Foley, Matheis, and Schaefer (2002) in Quoidbach, Mikolajczak, and Gross (2015) research tested the use of simulated 1-minute laughter exercises. It was found that fake laughter led to increases in positive emotions. The basis of these findings has provided strong evidence that the use of these alternative therapies can help improve one's positive experiences. It is important for health professionals to be knowledgeable on these alternative therapies.

Students learning about gelotology will be exposed to new careers which have an impact within the allied health field. According to Warren (2001), clown doctors are in hundreds of hospitals and healthcare settings in at least a dozen different countries around the world (including Canada, Britain, France, Brazil, Austria, Germany, Italy, Switzerland, Spain and The

States). As more people are educated on this approach to improving health, it may shift the direction of health care. Many hospitals have seen the changes in patients as a result of the care and entertainment of clown doctors. Spitzer (2006) stated how clown doctors helped a twelve-year-old patient in the burn unit, to stop screaming and become settled. Also, clown doctors are not only for children. Adult patients also benefit from seeing clown doctors. "Our society tends to dismiss play for adults. Play is perceived as unproductive, petty or even a guilty pleasure. The notion is that once we reach adulthood, it is time to get serious. Between personal and professional responsibilities, there's no time to play" (Tartakovsky, 2012, para 1). It is the objective of the capstone project to educate more people, so they are more aware of the research on gelotology. The knowledge learned can greatly impact the allied health field by the new course offering.

Benefits to the Workplace

The deliverable for this capstone project can have a great impact on society as well. The more people that are educated on the principles of gelotology; the more knowledge of its importance in society will become known. The benefits of a course on gelotology do not only help individuals in the allied health field, but it also helps the general population. Workplace stress has become a growing concern for employers. According to Hirsh (2005), the American workplace has seen an increase in stress due to decline in resources and added competition. The lack of resources has led people to work more hours and risk an increase in their stress. The development of laughter programs can also be used to help reduce employee stress. The results of stressed employees have revealed that employees will more than likely be unhealthy, poorly motivated, less productive and less safe at work. The results of this can affect an organization's ability to succeed in a competitive market Mani, Sritharan, and Gayatri (2014). Addressing the

problems of stress can help improve society and the productivity of business, which has an impact on the economy.

A study conducted by Mani, Sritharan and Gayatri (2014) found that job stress affects productivity, absenteeism, workplace errors and job dissatisfaction. They also suggested more employee training and knowledge of information about job stress. The education on this topic can address the problems and provide valuable solutions for improvement in the workplace. The XYZ Institute has other programs that are offered and students outside of the allied health field can take the gelotology course and bring this knowledge in their respective fields of study as well.

Beckman, Regier, and Young (2007) conducted a study (Fig 3.) that focused on the elements of laughter yoga on personal efficacy in the workplace and found a 100% positive change in a control group of laughter participants.
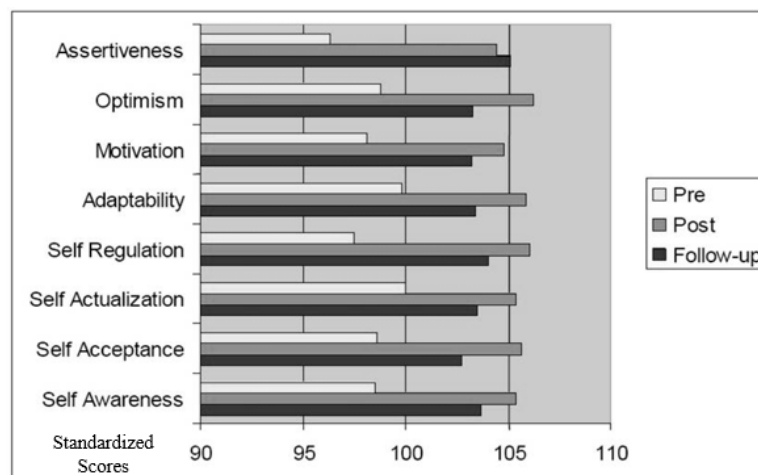

Figure 3. *Laughter Yoga on Personal Efficacy in the Workplace*

From Effect of Workplace Laughter Groups on Personal Efficacy Beliefs, by Beckman, Regier and Young. Copyright 2007 by The Journal of Primary Prevention with permission.

For 14 days a laughter yoga session was conducted for 15 minutes. (Fig. 3) shows the results of

the laughter groups based upon their changes in assertiveness, optimism, motivation,

adaptability, self-regulation, self-actualization, self-acceptance, and self-awareness.

> The positive outcomes seen in this study lead to the preliminary conclusion that a
> workplace laughter groups can appeal to a diverse range of employees, can be effective
> with minimal investment of time, and may have sustained positive effects on self-beliefs
> that have been shown to correlate with positive workplace behaviors (Beckman, Regier &
> Young, 2007).

Studies like what is depicted in (Fig. 3) need further research and should be implemented

within the workplace. Kataria, the founder of laughter yoga, has introduced the concept of

laughter yoga worldwide. He speaks at various conferences to spread the word of using laughter

to reduce stress. Using his studies Kataria has found implementing a laughter intervention in the

workplace has benefits such as: improving team building communication, innovation, creativity,

increasing attention spans in meetings, and improving peak performance (Kataria, n.d.).

Laughter therapy programs create fun in the workplace. Work has been known to be a

serious place. However, fun in the workplace is now becoming more common. "As kids, we go

out to 'play.' Later in life, we 'play' sports or 'play' music," he writes in one posting. "But then

in sharp contrast, we leave our homes each day and go to work. The term implies doing

uninspired, often boring and yucky things" (Alsop, 2010, p. 50). However, this has changed in

recent years. Companies like Google, which is ranked one of the best places to work, understand

the concepts of work and play. Also, when employees are happy it can have a direct impact on

sales. According to Baldonado (2015), workplace fun is an important topic in business; laughter

yoga was named as one effective method of having fun in the workplace. Popular companies

such as Pike Place Fish, Southwest Airlines, FaceBook, and Google have all incorporated these

practices into their culture. These organizations have realized how much time is spent on the job.

According to Everett (2011), we spend more than 90,000 hours at work and with the downturn of the economy staff must now accomplish twice the work with half the resources. The amount of time spent at work led to a greater deal of stress on employees.

When corporations adopt a culture of fun in the workplace, performance improves. Yerkes (2003) cited several benefits of using fun in the workplace, including stimulating creativity, fostering commitment, improving employee relations, and reducing stress. The capstone project, shows the benefit of laughter programs in the workplace. The positive changes of developing a course on gelotology, benefits the specialization of education and management by improving learning and fostering change.

The development of the deliverable contributes to the specialization of education and leadership because through its creation it will help the XYZ Institute to develop its culture of learning. Thobani (2012) states innovation happens when organizations are committed to learning. Therefore, organizations need to utilize the skills of the workers they employ. Organizations that have a learning culture will build the competence and confidence of employees to develop new ideas to change the organization. The XYZ Institute will achieve a culture of learning by allowing faculty to submit ideas that promote change within the organization. The researcher recognized a problem and developed a solution to address the problem. The deliverable is an innovative idea that allows the sharing of ideas. "A learning culture consists of a community of workers instilled with a 'growth mindset.' People not only want to learn and apply what they've learned to help their organization, but they also feel compelled to share their knowledge with others" (Grossman, 2015, para 16).

The XYZ Institute is currently working on continuous improvement through its programs and curriculum. However, the school has a high turnover rate of leadership, faculty and students.

For example, the school has had three presidents, three deans and six changes of one division of its department chairs. In the past faculty was not involved in any organizational changes. Using Hamel's (2007) radical innovation test; which consists of the following series of questions: do the organizational projects (A) have the power to change customer expectation? (B) Change industry economics and (C) change the basis of competitive advantage? The XYZ Institute needs to revise its organizational resilience practices. The current initiatives have the potential to be radical, but they must include the proper stakeholders to effectively implement change. Allowing faculty to design courses is one step towards developing a culture of learning.

To better assess if the XYZ Institute is creating a learning culture, Conner and Clawson (2004) designed a learning culture audit shown in Table 3. The results revealed the schools prolearning culture rated at twenty-six and the anti-learning culture rated thirty-four. There is a need for the XYZ Institute to review its learning culture to implement change.

Table 3. Learning Culture Self-Audit

Pro-Learning Culture	1-5	Anti-Learning Culture	1–5
People at all levels ask questions and share stories about successes, failures, and what they have learned.	3	Managers share information on a need-to-know basis. People keep secrets and do not describe how events really happened.	5
Everyone creates, keeps, and propagates stories of colleagues who have improved their own processes.	2	Everyone believes they know what to do, and they proceed on that assumption.	3
People take time regularly to reflect on what has happened and what may happen.	1	Little time or attention is given to understanding lessons learned from projects.	3
People are treated as complex individuals.	2	People are treated like objects or resources without attention to their individuality.	5
Managers encourage continuous experimentation.	1	Employees proceed with work only when they feel certain of the outcome.	3
People are hired and promoted on the basis of their capacity for learning and adapting to new situations.	1	People are hired and promoted on the basis of their technical expertise as demonstrated by credentials.	1
Performance reviews include and pay attention to what people have learned.	1	Performance reviews focus almost exclusively on what people have done.	5
Senior managers participate in training programs designed for new or high-potential employees.	1	Senior managers only kick off management training programs, rarely facilitating conversations or courses.	3
Senior managers are willing to explore their underlying values, assumptions, beliefs, and expectations.	1	Senior managers are defensive and unwilling to explore their underlying values, assumptions, beliefs, and expectations.	5
Conversations in management meetings constantly explore the values, assumptions, beliefs, and expectations underlying proposals and problems.	4	Conversations tend to move quickly to blaming and scapegoating with little attention to the process that led to a problem or how to avoid it in the future.	1
Customer feedback is solicited, actively examined, and included in the next operational or planning cycle.	5	Customer feedback is not solicited and is often ignored when it comes in over the transom.	1
Managers presume that energy comes in large part from learning and growing.	1	Managers presume that employee energy comes from corporate success and profits.	5
Managers think about their learning quotient (their interest in and capacity for learning new things), and the learning quotient of their employees.	3	Managers think that they personally know all they need-to-know and that their employees do not have the capacity to learn much more than they know.	4
Total for pro-learning culture	26	Total for anti-learning culture	34

From Creating a Learning Culture: Strategy, technology and Practice, by Marcia Conner Copyright

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In completing the learning culture audit, it revealed how the implementation of the deliverable would help the school to develop its learning culture. As a senior faculty member, it provides feedback from an individual that has direct contact with the most important stakeholder, the student. Obtaining feedback at this level the researcher has taken a student problem and developed a solution to address the problem. Because the deliverable is a new idea, it would allow the school to participate in experimentation. Reflecting on the experiment of a new course would allow the school to adapt, grow and improve as an organization. Garvin (1993) in Joo Yang and McLean (2014) states the importance of acquiring new knowledge from employee creativity and its affects on the learning culture of an organization. The deliverable provides new knowledge on gelotology and how it should be incorporated into the allied health field.

Outcome (6) *Lead innovation through inquiry* as part of Capella's competencies research has prepared the researcher as a leader-manager by teaching the value of thinking outside of the box and constantly thinking of new ways to innovate. Today businesses thrive on innovation; in a competitive market, it is innovation that is the key to an organization's survival. Almost every year various companies strive to be on top. To be number one and gain as much market share as possible, a company must constantly seek new ways of conducting business. Even during poor economic times, research and development efforts must not stop. According to Jaruzelski and Dehoff (2010), more than 90 percent of executive's surveyed said innovation is critical as they prepare for an upturn, and a majority have maintained or expanded their portfolios and are pursuing new products to improve growth and margins. As the XYZ Institute struggles to

improve attrition; adding new programs and innovative ideas may help to attract enrollment at the school.

The deliverable is an innovative course that is designed to engage students. As an educator within the specialization of education and leadership, it is important to understand the importance of designing courses that engage students. Yearwood, Cox, and Cassidy (2016) stated student engagement should be designed into three parts: student engagement with the instructor; student engagement with their peers; and student engagement with the content. Combining the three will ensure the highest level of achievement for student learning. The course on gelotology uses the three forms of engagement by teaching students to interact with each other, engage with the instructor by following guided interactive instructions and engaging with innovative educational content.

The negative effects of not actively engaging students can lead to withdrawing, academic failure, boredom, passivity, absenteeism, aimlessness, avoidance, and apathy. The deliverable provides an engaging class that entertains students while at the same time teaching them new skills. Today's courses should involve some form of fun in learning to further grasp students' attention. Argan and Sever (2010) describes this form of learning as *edutainment* which combines entertainment and learning. Argan and Sever conducted a study on edutainment in marketing communication courses using a questionnaire as a data gathering tool. Findings of the study indicated that the use of edutainment can help to improve students' attention and participation. The study also suggests other disciplines should extend edutainment into their specialties as well. It is the objective to implement this course at the XYZ Institute and hope that one-day courses on gelotology are offered in all schools.

Conclusion

The capstone project objective is to address the XYZ Institute problem of limited electives courses that do not interest students. Freshman students have reported during weekly feedback discussions their dissatisfaction with the number of electives being offered. They found the electives to be boring and not engaging. Also, the students suggested courses that would further support their education in their respective field of study. Gelotology is something that is lacking in health care, and there are limited programs available to educate people on this growing body of knowledge. Currently, the XYZ Institute does not distinguish itself from other colleges offering the same programs. The new course could attract new students and help build a unique brand for the school. The founder of laughter yoga has developed a group of people specially trained in his practices of laughter yoga. The development of the deliverable will also help to promote his initiatives of improving health through laughter. The positive impacts of a course on gelotology can help to reduce stress and improve the quality of life of society as a whole. Further studies on this topic are needed to improve the rigor of incorporating laughter program in all workplaces. However, the course will educate people who can start their initiatives to further educate more people and expand the knowledge of using something as simple as laughing to improve health.

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