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END-OF-LIFE PEDAGOGY IN NURSING INCORPORATING A GAME

By

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A DISSERTATION IN PRACTICE

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Abstract

Preparing nursing students to care for the dying can be challenging for faculty and a difficult topic for students to grasp. Nursing governing bodies require curricula to include end-of-life information. Literature shows a lack of end-of-life education throughout nursing curriculum. Limited exposure to dying patients creates concerns for nursing students being unprepared to provide adequate end-of-life care. Further discussion of this problem was included and why this topic is an essential part of nursing education. Offering a game as an alternative teaching strategy can provide faculty with an option for educating on end-of-life and a nonconventional way of learning for students. The purpose of this research was to introduce an end-of-life board game for nursing students. Qualitative case study method was used. Components and affective influence of the game were discussed. Data collection and analysis was explained to support use of a game as a teaching strategy for end-of-life education. As a result of students playing *The Path of Life: A Journey of Living at the End-of-Life* game, they left with increased knowledge of end-of-life issues, felt more prepared to care for the dying, and, in some cases, were more comfortable with the thought of caring for the dying. Introducing end-of-life throughout nursing curricula would benefit patients and families at end-of-life as students could apply knowledge and experience learned from playing the game.

Key words: End-of-life, nurse education, pre-licensure nursing student, games

Dedication

I dedicate this work to all the patients and families I and many others have cared for in hospice, and nursing students who thirst for knowledge and understanding of the dying to best serve their needs at the end of life's journey.

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CHAPTER ONE: INTRODUCTION

Background of the Problem

Nursing students are prepared to function in a variety of acute care settings, and receive community and end-of-life exposure. The National League of Nursing (NLN) completed a report in 2013 which stated there were 1,839 registered nurse programs in the United States. City of Hope research discovered a void in end-of-life nursing education, noting “less than 2% of content in nursing textbooks was related to end-of-life” (City of Hope and American Association of Colleges of Nursing, 1998, p. 2).

Not all students experience a dying patient in their clinical rotations, yet most nurses care for patients at end-of-life throughout their careers. There will be an increase of baby boomers over the age of 85 by 2020 (National Institute on Aging, n.d.), and it is essential to educate nursing students in preparation to care for the population nearing end-of-life. Literature found a lack of clinical sites for personal hands-on experience, and limited exposure to end-of-life care for many students (Fluharty et al., 2012, p. e135).

Faculty may lack knowledge to teach end-of-life nursing education which can lead to a void in curriculum. Pullis (2013) stated, “Nurses spend more time with the dying and their families than any other health professional... making end-of-life care an essential component of nursing education” (p. 464). With the many courses and topics required throughout nursing curricula, teaching end-of-life content runs the risk of being eliminated as a matter of time restraints. Herbert, Moore, and Rooney (2011) discussed the struggle many nurses have being advocates at end-of-life due to lack of education. Statistics related to end-of-life instruction revealed deficiencies in the following areas: 71% rated inadequate pain management education, 62% rated end-of-life content

inadequate, and 59% rated management of symptoms lacking (Mallory, 2003, p. 306).

There are ways to incorporate end-of-life material, making it easier for faculty to facilitate instruction, and broaden students' awareness of this delicate topic. Looking at factors that influence knowledge and adjusting to learning styles can make a difference in students assimilating information.

Regis University Loretto Heights School of Nursing (RULHSN) quality and evaluation committee conducted a survey with students who completed their nursing program in both 2012 and 2013. Data regarding various topics and issues were assessed, and compiled through Educational Benchmark Inc. (EBI) (2014). RULHSN was compared with six other like-size universities across the United States. One question pertained to receiving core knowledge of assisting patients to achieve a peaceful death- (N=127). RULHSN rated 75.2% and other institutions ranked 77.3% on a Likert Scale of one to seven. Data showed little change from the previous year. Although some changes have been made in RULHSN curriculum to address this issue, limited education on end-of-life care nationwide was shown to be a continued problem.

The American Association of Colleges of Nursing (AACN) (1998) offered guidelines for universities to incorporate end-of-life material throughout curricula. They found many schools of nursing omit this material based on lack of time and faculty comfort on this difficult topic. Lectures are used frequently to address material needed for nursing practice. With end-of-life care there are other factors involved such as the emotional part of the dying process with patients, family, and other significant members of their life circles. PowerPoint lectures are not conducive to engaging students at the level of reflection needed to embrace the depth of emotions and choices made at end-of-

life. Looking at other options to deliver this message is important for faculty developing alternative teaching strategies. This research discovered a tool for faculty to instruct students on end-of-life,

Introduction and Statement of the Problem

Nurses have been at the bedside from cradle to grave for years yet little training has been offered to assist them to best care for the dying. “Nurses have a unique and primary responsibility for ensuring that individuals at the end of life experience a peaceful death” (AACN, 1998, para.1). Although the AACN suggests where to include end-of-life education throughout curricula, such education is not always incorporated. Discussions about death and dying can be difficult and uncomfortable for both faculty and nursing students.

The greatest problem is that nurses are unprepared to provide best care for the dying. Offering education on this delicate topic can be approached from alternative teaching methods. Assisting faculty to facilitate teaching the many facets of end-of-life care is critical. Engaging in end-of-life conversations and experiencing the emotional aspects of working with the dying is essential for educating nursing students. Providing students with an understanding of issues and concerns faced by both patients and families during this time is important to deliver optimum patient care. Lacking the ability to take a difficult topic and engage students leaves some faculty stymied. There is a need to assist faculty in creating a solution to this dilemma.

Incorporating a board game as a teaching strategy using multiple case study method could allow both faculty and students to have a greater understanding of the end-

of-life progression. Education on this process is a means of preparing nurses to provide best care for the dying.

Purpose Statement

The purpose of this qualitative case study was to assess the effectiveness of a board game as a teaching strategy for end-of-life education in nursing curricula.

Research Questions

Development of an end-of-life game was created to foster nursing students' awareness of decisions patients face at end-of-life. The following questions guided this qualitative case study:

- What knowledge was gained through participation in the case study end-of-life game?
- What aspects of playing the end-of-life game assisted nursing students in feeling more prepared to care for the dying?

Significance of the Study

This study offered an optional tool for end-of-life education to be included in nursing curriculum. Using games as a teaching strategy for end-of-life education can engage students in a manner different than lecture-based instruction. Outcomes from this study will offer data to support further research, and evidence to expand nursing curriculum to include end-of-life content.

Educating nursing students on end-of-life will provide improved knowledge for bedside care for those patients facing terminal diseases. Through participation in the game, students gained understanding of patient choices, and decisions to be made at this

stage of life. Nursing practice, along with patient and family satisfaction, has potential to improve due to a greater awareness of end-of-life issues.

This study will support policy set by accrediting boards for nursing education and follow AACN requirements for nursing curriculum to include end-of-life training. As a result of this study, there is a possibility of promoting additional policy requirements for end-of-life education. The game has great potential to offer opportunities for interdisciplinary education on end-of-life.

Aim of the Study

The aim of the study was to create an evidence-based end-of-life game as an alternative teaching strategy to engage nursing students in the process of decisions patients make at the end of their life. Ultimately, through playing the game student nurses will be more aware of the needs of the dying.

Methodology Overview

A qualitative case study method was chosen for this research. Discussing end-of-life issues can be difficult. End-of-life care requires nurses to be advocates for their patients (Pullis, 2013). Through assuming the role of patients in case scenarios, the reality of their life experiences were realized by the students. The case scenarios offered a teaching method on end-of-life that was very realistic. Creswell (2013) discussed case studies being effective in increasing understanding of a single topic. The unit of analysis used in this research was an author-developed end-of-life game: *The Path of Life: A Journey of Living at the End-of-Life*. The intent of the study was to assess if students could learn end-of-life education through playing a board game. Examples of patient and family dynamics and diagnoses served as the basis of the game. Students participated in

the game by each taking the role of patients on their end-of-life journeys. The game was the main focus of research, and included exploring the engagement of nursing students playing the game. Themes emerged through data collection as students and faculty completed surveys. Creswell (2013) spoke about multiple themes emerging in case studies which evolved from participants having a variety of backgrounds. Answers to research questions became apparent through this process.

Definitions of Relevant Terms

Basic terms were defined as necessary for greater understanding of research on the topic of end-of-life in nursing school curriculums. The following terms were used within this study:

End-of-life: final stage of living.

Nursing education: theoretical and practical training through specific curriculum requirements to prepare a person to practice as a Registered Nurse.

Pre-licensure nursing students: students who are completing all requirements in nursing school curriculum and have not taken the licensure exam to practice as Registered Nurses.

Games: interactive participation by volunteers following specific sets of rules and guidelines within a distinct timeframe for a defined purpose.

These terms were relevant to enhance understanding of this research on end-of-life in nursing curriculum. The terms were used throughout the study.

Assumptions

The major assumption in this study was that there exists a need to increase end-of-life education for nursing students. Analytic assumptions included alternative means for

educating these students on this delicate subject through awareness of end-of-life issues. Faculty could use an alternative teaching method, providing a game on end-of-life. Providing both students and faculty with a means to increase end-of-life education could result in enhanced comfort and care for patients at the end of their life journeys.

Limitations

Participation in the game was limited to pre-licensure nursing students. The focus was limited to one four-year university nursing school. Within this group of nursing students were those who had a prior degree in another field, those working in the medical field in another capacity, and traditional students. The data gathered focused on differences and similarities within cohort groups. A study limitation was participation in the game was only offered to students who completed or were in a community health course. The game was played once by each student. The time frame of playing was one hour, which included pre-game and post-game survey completion and a focused review discussion. Understanding how faculty perceived end-of-life education was accomplished through an online survey with no face-to-face interviews.

Limitations included a time factor for playing the game where conversations extended beyond the one hour estimated time of completion. Since there was only one board game there was a limit on the number of participants able to play at one time. Student schedules limited their availability to participate in the game. Another limitation was the lack of further follow-up with students to confirm whether playing the game prepared them to work with end-of-life situations.

The greatest challenges with using this case study were awaiting Institutional Review Board (IRB) approval from Regis University and a limited number of student

participants. Students who did participate mentioned that some classmates were uncomfortable with the thought of playing an end-of-life game. Another challenge was limited evidence-based research supporting the use of a game for end-of-life nursing education. Kiili (2007) discussed the use of “problem-based gaming” (p. 394) to create effective games and increase student learning. The ideas from her research were helpful to support how effective a game could be in teaching nursing students on end-of-life care.

Challenges with using this case study developed from only nine students participating in the game. Creswell (2013) spoke about multiple themes being used in case studies which evolved from participants having a variety of backgrounds. Another challenge was research supporting the use of a game for end-of-life nursing education. Limited research was found discussing end-of-life board games for nursing education.

Leader’s Role and Responsibility in Relation to the Problem

As a leader and researcher, personal strengths of an activator, positivity, connectedness, learner, and arranger were catalysts for change to generate new solutions regarding end-of-life education (StrengthsQuest, 2012). These qualities were useful in assessing the issue and moving forward with an unconventional teaching strategy. *The Path of Life: A Journey of Living at the End-of-Life* game was created to support faculty in its role of educating nursing students on end-of-life issues, and to offer students a means of learning the choices and challenges a terminally ill patient faces at end-of-life.

Pursuant to the problem, creating an end-of-life game was essential to help fulfill AACN guidelines on end-of-life education. Providing faculty with a different teaching approach for end-of-life education was a means to help students gain knowledge and understanding of caring for the dying as they moved into clinical practice. Literature has

shown the lack of education on end-of-life in nursing school curriculum. *The Path of Life: A Journey of Living at the End-of-Life* game was created as an alternative teaching strategy to support students and enhance caring for the dying on their end-of-life journeys.

Summary

Nurses have cared for the dying in many settings over the centuries. Although they serve many types of patients at the bedside, many lack understanding in end-of-life care. Studies have shown an absence of end-of-life education in nursing curriculum. This has created nurses who are unprepared to assist patients and families with adequate care during end-of-life.

Faculty comfort and knowledge in end-of-life has limited creation of student education and awareness of how to best serve this population. The purpose of creating *The Path of Life: A Journey of Living at the End-of-Life* game was to address these issues. Through this alternative teaching strategy, students could have the opportunity to increase knowledge and preparation in caring for the dying. Introducing this game to both faculty and students enhances policy standards on end-of-life education in nursing curriculum and potential for interdisciplinary education on end-of-life care. Creating a new teaching strategy using a game for end-of-life care education offers a refreshing new approach to this difficult topic. It was assumed there was limited end-of-life education, creating the need for an alternative teaching strategy to educate nursing students.

As a leader willing to take risks and find solutions to problems, *The Path of Life: A Journey of Living at the End-of-Life* game can bring new light to nursing education on

a topic that has been limited in the past. This game offers both faculty and students an opportunity to increase knowledge on end-of-life issues.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter will review literature regarding end-of-life education in nursing school programs. Several authors have written on methods for faculty to engage students and assist with retention of subject matter. Faculty faces many challenges to include all material required in curricula. End-of-life education is necessary for nursing students as they prepare to care for the dying. Discussing this sensitive material can be difficult for both faculty and students. Games offer an alternative teaching method students can find engaging. Multiple themes evolved from this literature review. Within each theme there were subthemes that emerged and will be deliberated.

Search engines used were: CINAHL, EBSCOhost, PubMed, MEDLINE, and Google Scholar. Search terms used in this literature review were: end-of-life OR faculty challenges AND end-of-life AND nursing education OR end-of-life education AND nursing schools OR games AND teaching strategy AND nursing curriculum OR simulation AND nursing curriculum OR nursing simulation OR hospice AND nursing curriculum.

The literature review was grouped into three main themes: importance of end-of-life education in nursing schools; faculty challenges: looking at various teaching strategies; and gaming as a teaching strategy for nursing students. Subthemes were used to further organize the literature review.

Purpose Statement

The purpose of this qualitative case study was to assess the effectiveness of a board game as a teaching strategy for end-of-life education in nursing curricula.

Aim of the Study

The aim of the study was to create an evidence-based end-of-life game as an alternative teaching strategy to engage nursing students in the process of choices and decisions patients make at the end of their lives. Ultimately, through playing the game student nurses will be more aware of the needs of the dying to provide best patient care.

Theme 1: Importance of End-of-Life Education in Nursing Schools

Nursing education includes many content areas. One area that often gets omitted, or receives less emphasis, is end-of-life care. Assessing the importance of end-of-life care in nursing schools is the focus of this theme.

Subtheme A: Lack of Education

With the lack of end-of-life education, many researchers have explored ways to implement this topic into nursing curricula. Mallory (2003) stressed the importance of end-of-life education in nursing schools. There has been a lack of this topic covered in schools over the years, resulting in nurses unprepared to care for the dying. As baby boomers are aging there will be a greater need for competent nurses to fulfill this role. Nursing students are hesitant to care for the dying due to lack of education (Mallory, 2003). Mallory (2003) continued to note that patients expect quality care and assistance with knowing options to make decisions at end-of-life.

Implementing end-of-life care into nursing curricula is essential in order to meet the needs of the dying. Mallory (2003) stated, “Patients are demanding palliative care when comfort and quality of life are the goals” (p. 305), and “Symptom management and end-of-life care content are crucial, yet many nurses report receiving little education while in school to care for the demands of this population” (p. 306). Cavaye and Watts

(2010) inquired about whether new graduates were adequately prepared to care for the dying. In their findings of nurses and nursing students, training had been inadequate and there was a need to improve curricula in nursing schools.

Subtheme B: Lack of End-of-Life Exposure

Guidelines have been given to nursing institutions by the End-of-Life Nursing Education Consortium, a national educational program to “improve end-of-life care by nurses” (Kopp and Hanson, 2012, p. e98). There is a need for end-of-life education, yet there is limited availability for all nursing students to experience death during clinical exposure, or have conversations on the topic in class discussions. Kopp and Hanson’s (2012) research “revealed students either did not feel comfortable caring for a dying patient, and the patients’ family, or did not have the opportunity available to them” (p. e98). Pulsford, Jackson, O’Brien, Yates, and Duxbury (2011) discussed many articles that mentioned lack of exposure to end-of-life education. They discovered that although end-of-life education was incorporated in some programs, it was necessary for students to have hands-on experience. This being said, the authors emphasized that end-of-life education in nursing curriculum is necessary for competence and comfort in caring for the dying.

Subtheme C: Student Reluctance to Care for the Dying

Due to the lack of education, students may not feel comfortable caring for the dying. Smith-Stoner (2009) stated nursing students are hesitant to care for dying patients (p. 115). Effective training to help reduce reluctance to care for this population could be achieved through looking at various teaching strategies. Kopp and Hanson (2012)

discussed the importance of including the many facets of end-of-life care, such as physical aspects, social, spiritual, culture concerns, and ethical and legal aspects (p. e98).

If end-of-life topics were discussed in classrooms or clinical sites it would have the potential to decrease anxiety on the part of the nursing student and improve patient care. Cavaye and Watts (2010) discussed including end-of-life education at all levels of nursing curriculum. Through their research they found nurses, regardless of level of education, were ill-prepared to care for the dying and displayed great anxiety for this patient population. What these authors discovered was end-of-life education was required in school, yet little was being taught in nursing curriculum. This resulted in nurses' inadequacy regarding pain and symptom management and recognition of signs and symptoms of death and dying. Tuxbury, McCauley, and Lement (2012) supported this finding recognizing end-of-life education as important yet not incorporated into curricula. Not including end-of-life education in curricula resulted in fear and inadequacy on the part of students to care for the dying.

Subtheme D: Possibilities of How and Where to Incorporate End-of-Life Education in Nursing Curriculum

Determining where to place end-of-life education in nursing curricula has been a challenge. Kopp and Hanson (2012) incorporated end-of-life education in a first semester nursing course taken by junior nursing students (p. e97). Smith-Stoner (2009) presented an end-of-life game that was available at that time to students, yet did not place it in any particular course. Her recommendation was to include this teaching modality in a theory class that would cover end-of-life content. Although not specific to end-of-life content, Stanley and Latimer (2010) included "The Ward" game in students' final

semester of nursing school. This prepared students for working on a “ward” in various roles as nurses after graduation. Pulsford et al. (2011) did extensive literature review for their research on classroom and distance learning end-of-life education. They concluded there is a worldwide need for increased end-of-life nursing education to support the dying. Through training on this topic, there would be a rise in comfort and proficiency in knowledge level of nursing professionals to care for end-of-life patients.

This literature focused on the need of end-of-life education and presented data to support this theme. It was found there is a lack of end-of-life education, and students continue to be reluctant to care for the dying as a result of this knowledge deficit. Looking for ways to include end-of-life education in curriculum was addressed through assessing various teaching strategies. The next challenge was looking at faculty role in end-of-life education.

Theme 2: Faculty Challenges: Looking at Various Teaching Strategies

Faculty plays a key role in educating students. Discussing end-of-life can be a challenge both with content and the emotional component of the topic. This section will focus on issues and trials for faculty concerning educating students on end-of-life care.

Subtheme A: Learning Styles

Student learning styles vary; the challenge for faculty is identifying the best teaching style to convey subject content to the class. One challenge is the consideration of the millennial learners. Students born in or after 1982 comprise this group of learners preferring hands-on education (Boctor, 2012). Games have been part of life for this group of learners. Bekebrede, Warmelink, and Mayer (2011) referred to this group as the “net generation” (p. 1522). Regarding this group of people they “... are learning,

playing, communicating, working, and creating communities very different than their parents” (2011, quotes Tapscott, 1998, p. 2, and Prensky, 2001a, p. 39). Boctor (2012) stated that this generation expects to have “instantaneous responses” (p. 96) and can multi-task more than other generations. Knowing this information helps faculty to create ways to educate students in a manner they will best learn content. Boctor (2012) and Bekebrede et al. (2011) addressed the need for using gaming in education, yet their respective focuses were different.

Faculty is challenged in its ability to convey pertinent information on subject matter to reach all students on a level of understanding. Using the material regarding the net generation from Boctor (2012) and Bekebrede et al. (2012) can assist faculty in bridging the gap in learning styles and generational understanding.

Subtheme B: Time

Another issue of concern was time. Faculty can incorporate PowerPoints and discuss material in limited time, yet there is a need to shift from faculty-focused to student-centered education and use various teaching strategies to address the needs of current students. Webb, Simpson, Denson, and Duthie (2012) and several other sources commented on how time-consuming creating games can be for student learning. This thinking goes back to using faculty-centered learning rather than student or content-centered learning. Boctor (2012), Bekebrede et al. (2011), and Stanley and Latimer (2010) all found positive results from student-centered learning such as a game or simulation. Although time might be limited in a faculty member’s day, it is essential to assess options for teaching strategies which might benefit student learning.

Subtheme C: Content

Curricula content is another concern of faculty. Concerns of faculty included where to fit an additional topic into an already crowded curriculum, increased technology, knowledge demands, and determination of who is qualified to teach the material (Mallory, 2012, quotes Sheldon, 1998). As seen by the last reference date, this has been an issue for a long time. The AACN and the NLN provide criteria required in nursing curricula. Nursing students need to pass the National Council Licensure Examination (NCLEX) in order to work as nurses. Although faculty does not teach to the exam, NCLEX questions have been more of a challenge because of an increase in technology and knowledge in the health field. Boctor (2012) has incorporated the teaching strategy of gaming to reflect NCLEX-type questions to facilitate learning. This option fulfills a creative way to teach content and prepare student nurses for becoming competent nurses.

This section covered various faculty issues with incorporating end-of-life into curriculum. Learning styles, time, and content appeared to be the biggest factors related to faculty teaching issues. Looking at alternative teaching strategies may remedy some of these issues. This was the topic in theme three.

Theme 3: Games as a Teaching Strategy for Nursing Students

Students learn in a variety of ways. Faculty-centered teaching versus student-centered methods has been the focus for many years. Alternative methods allow for a student-centered approach rather than a faculty-centered style.

Subtheme A: Benefits of Games

An alternative way of teaching for the net generation would include games (Bekebrede et al., 2011). These provide activity that is engaging and includes collaboration that could be transferred into real-life situations (p. 1522). The net generation “prefer[s] to work together and use technology-rich educational methods” (p. 1527). This supports gaming as a teaching strategy. Although some approach games as just entertainment, this teaching strategy can provide an environment that is fun and can bring “deep rather than surface level, passive learning” (Boctor, 2012, p. 96). Higher education could benefit from using games to teach supporting data that show “students prefer experiential learning, active learning or collaborative learning” (Bekebrede et al., 2011). Games offer many learning styles that would enhance a greater number of students and provide the opportunity to grasp important nursing knowledge (Boctor, 2012).

Teamwork is essential to nurses. For students to learn this important aspect in the role of a nurse, gaming offers this opportunity through a stimulating means of education (Stanley & Latimer, 2010). The components of their game were divided into three groups: relevance to practice, relevance to specific skills, and questioning what could be done better in regards to the game itself (Stanley & Latimer, 2010, p. 24). Reactions of students from this study based on questionnaires after playing the game were: “enabled teamwork,” “allowed us to actively implement each skill,” “critical thinking,” “decision making,” and the realization that “all skills are important” (Stanley & Latimer, 2010, p. 24). Another finding by Stanley and Latimer (2010) was patients and families appreciate “empathetic communication” (p. 21). Teamwork and retention of information were also

seen when gaming was incorporated into medical school curricula (Webb et al., 2012). Their data also led to an increased improvement in interprofessional dialogue when in clinical sites and was seen as a positive outcome from their research (p. 332).

Although many educators may think games are just for fun, Gee (2007) mentioned games as a form of play to incorporate information learned through education. While many students learn material taught in class for exams, Gee (2007) discovered through play there was an interaction of material learned and interaction that assisted with remembering. Emphasis on student-centered learning versus faculty-centered instruction played a role in success of using games for education.

Miller (2008) described the connection between games and educational learning. A student gathers information, analyzes the information, makes decisions, and evaluates the consequences (p. 179). His research showed the same student learning process and benefits that occurred playing a game. Through games there is teamwork, decision making, assimilation of material, and, ultimately, application of learned material in the practical setting.

Subtheme B: Types of Games

There were multiple games addressed in literature that were effective teaching strategies. Webb et al. (2012) and Boctor (2012) both used a Jeopardy-type game to review material learned previously, and to provide conversation for discussions on game questions. Stanley and Latimer (2010) created a simulation game whereby each student had a role on a nursing unit to mimic a hospital ward. Kopp and Hanson (2012) and Smith-Stoner (2009) used high-fidelity simulation as the basis of their learning techniques. Although these were not traditional games, the use of simulation similar to

Stanley and Latimer (2010) offered positive results for an increase in learning by nursing students.

End-of-life simulation offered students an opportunity to take real-life situations in a control simulation setting in nursing school. This type of learning modality proved beneficial for students through research conducted by Kopp and Hanson (2012).

Through assessing situations, treatment options, and offering education on end-of-life progression, students were able to transfer knowledge to actual clinical settings.

Another approach was seen by Kopp and Hanson (2012). In their research, they used a board game that someone else had created years prior that focused on end-of-life issues. This game was an interactive experiential game of situations and events at end-of-life where the student assumed the role of patients.

Through participation in the game and discussions students had a greater understanding of end-of-life issues. Kopp and Hanson's (2012) research resulted in positive feedback and "students felt they could successfully transfer insights gained from playing gaming simulation to real clinical situations" (p. e-101).

Subtheme C: Gathering Data from Games

The benefits of games were previously mentioned. How the data were gathered occurred in a number of ways. In several of the studies pre- and post-tests were used to assess content knowledge. Questionnaires distributed after the game offered data for Stanley and Latimer (2010). Simulations and board games used by Kopp and Hanson (2012), Stanley and Latimer (2010), and Smith-Stoner (2009) included debriefing as a means of gathering data for game effectiveness. That method seemed to benefit both faculty and students by providing an opportunity to reflect on the game and content. It

also allowed a means for students to clarify information and faculty to offer support to students on the subject matter.

Subtheme D: End-of-Life Education

Specific to end-of-life content, Kopp and Hanson (2012) evaluated nursing student education with the use of simulation and a game. This article was reviewed specific to games in nursing education. A board game was used to assist students in being more comfortable with end-of-life care, various courses of events, and emotions that personally arose through playing the game. There were positive outcomes as students became more aware of end-of-life care, loss and suffering that can occur at end-of-life, and opportunities to address their own mortality (p. 101e). Webb et al. (2012) demonstrated how game techniques could benefit medical students in their surgical rotations. Through playing a game focused on geriatric care, these students walked away with an increased understanding of content shown through post-test. Using gaming to teach nursing students specifically in end-of-life care could show similar results. Focused-topic games could benefit students to increase their knowledge base of end-of-life care, symptom management and an overall increase in comfort in caring for dying patients.

Subtheme E: Concerns with Games

Several articles commented on increased time needed to develop and implement games. Webb et al. (2012) and Smith-Stoner (2009) discussed preparation time to create the game itself, expected outcomes, and time for set up and explanation to students. Webb et al. (2012) discussed the use of multiple faculty members or other clinicians to facilitate games to decrease burden on faculty. Another concern was student anxiety due

to the possible competitiveness of playing a game (Webb et al., 2012, p. 303). Boctor (2013) found competition was positive and was “adding to their engagement and participation in the game” (p. 99). Developing a PowerPoint for content delivery may be easier for faculty yet might be more faculty-centered than student-centered. Assessing the goals of delivery was important and could affect the usefulness of the game if not incorporated. Smith-Stoner (2009) discussed the importance of developing a course plan to incorporate educational material into a game and manage time more efficiently.

Educators are aware of the vast amount of material that needs to be covered in nursing curricula. Including games may be interpreted as shifting from learning to playing as discovered by Miller (2008) in his works on games in education. He discussed controversy over the idea of utilizing games in education since many people considered games primarily entertainment. To move forward playing games in the classroom demanded further education for faculty on benefits of games, the connection between material learned, and application within life itself. Miller (2008) saw the connection between games and learning, and found games could be the initial tool used to educate students followed by additional information on the particular subject.

Summary

The literature review explored the three themes discussed, evaluating end-of-life education in nursing schools. The literature review suggested strategies to increase end-of-life nursing education by including creative, engaging teaching strategies like games. End-of-life education frequently gets omitted in nursing curriculum because of limited time and faculty uneasiness in discussing this topic. Students are not comfortable in caring for the dying with little education offered during their schooling. The use of

games as an option to incorporate end-of-life care information could make a difference in students being willing to care for the dying. This literature review addressed types of games in education and the benefits and concerns of teaching end-of-life curricula.

Games can be engaging and stimulating for students and might decrease faculty stress and unfamiliarity with the topic if it is presented in this fashion. Providing innovative teaching strategies will enhance learner understanding and retention to best care for patients when they graduate as registered nurses. Use of games to educate on end-of-life supports research found on the need to broaden the scope of teaching strategies for faculty regarding education on this sensitive topic. There are benefits on many levels: faculty has alternative teaching strategies, end-of-life topic delivery, and greater understanding of end-of-life care for students. Patients and families will benefit from this increased knowledge through nursing care at the end of their life journeys.

CHAPTER THREE: METHODOLOGY

Introduction

Nurses have been at the bedside from cradle to grave for years yet little training has been presented to assist them to offer best care for the dying. “Nurses have a unique and primary responsibility for ensuring that individuals at the end of life experience a peaceful death” (AACN, 2013, para.1). Although the AACN suggests where to include end-of-life education throughout curriculum, it is not always incorporated. Discussions about death and dying can be difficult and uncomfortable for both faculty and nursing students.

The immediate concern is that nurses are unprepared to offer best care for the dying. Providing faculty education and teaching strategies on this delicate topic can be approached from alternative teaching methods. An essential component of educating nursing students on end-of-life care is offering opportunities for engaging in end-of-life conversations and experiencing the emotional aspects of the dying process. Providing students with an understanding of issues and concerns faced by both patients and families during this time is important to deliver optimum patient care. Having the ability to discuss a difficult topic and engage students leaves some faculty stymied. There is a need to assist faculty in creating a solution to this dilemma.

Incorporating games as a teaching strategy using multiple case study methods could support both faculty and students to have a greater understanding of the end-of-life progression. Education on this process is a means of preparing nurses to provide best care for the dying.

Purpose Statement

The purpose of this qualitative case study was to assess the effectiveness of a board game as a teaching strategy for end-of-life education in nursing curricula.

Aim of the Study

The aim of the study was to create an evidence-based end-of-life game as an alternative teaching strategy to engage nursing students in the process of choices, and decisions patients make at the end of their lives. Ultimately, through playing the game student nurses will be more aware of the needs of the dying to provide best patient care.

Baseline Assessment Information

Before beginning research, there were repeated comments from nursing students stating they received little end-of-life education throughout their curricula. Faculty included some end-of-life material in some courses, yet it was not consistent throughout cohorts. City of Hope and American Association of Colleges of Nursing (2012) have addressed insufficient end-of-life education in nursing curriculum. After years of personal experience working in the hospice setting, it seemed appropriate to take this clinical knowledge and skill to the classrooms.

Research Questions

The Path of Life: A Journey of Living at the End-of-Life game was created to foster the nursing students' awareness of choices and decisions a patient faces at end-of-life. The following questions guided this qualitative case study:

- What knowledge was gained through participation in the case study end-of-life game?

- What aspects of playing the end-of-life game assisted nursing students in feeling more prepared to care for the dying?

Method Rationale

A qualitative case study method was chosen to obtain student perceptions about the game technique. The affective domain can be difficult to reach in nursing education and a challenge for both students and faculty. *The Path of Life: A Journey of Living at the End-of-Life* game allowed each student an opportunity to play the part of a patient on his or her journey with a terminal disease. The game allowed students to choose from four case studies representing different end-of-life situations (see Appendix A). As a result of having multiple case scenarios, students could see similarities and differences in patients' individual journeys at end-of-life.

Participants

Participants were both nursing students and faculty. Students were from a four-year nursing school program. They were either enrolled in or completed a community health course and were either juniors or seniors. Students were from traditional and accelerated nursing degree programs. They were invited with a formal invitation which included their consent form sent through Regis University email (see Appendix B) after permission from Regis and Creighton University Institutional Review Board (IRB) (see Appendix C) and the school of nursing dean. Participants were not enrolled in a class taught by the researcher while playing the game.

Faculty survey participants were from three nursing schools. Their survey was created in SurveyMonkey® and offered to them through a formal invitation including consent form (see Appendix D) after IRB approval. No face-to-face interviews occurred.

Instrumentation

Initial Student Pre-Game Survey

An initial pre-game survey was conducted with students in which they were asked a series of open-ended questions on their past end-of-life experiences and how comfortable they were caring for the dying. This was completed just prior to playing the game. See Appendix E for the pre-game survey.

Student Post-Game Survey

A post-game survey was administered to students after playing the game. This survey gathered data on the game's effectiveness for supporting a greater understanding of end-of-life issues and choices made throughout the journey. Questions were asked to determine whether playing the game increased knowledge on end-of-life issues, and if students felt more prepared to care for the dying as a result of playing the game. See Appendix F for the post-game survey.

Observation

While the students played the game, reactions and verbal comments were observed. The type of observation was "nonparticipation/observer as participant" (Creswell, 2013, p. 167). The observer was physically present in the room while students interacted in the game. Prior to the start of the game the observer's interaction was necessary to explain the rules and flow of the game. The observer did not participate in the game.

Field Notes

Field notes were taken by the observer while viewing the interaction of participants playing the game. These included watching physical mannerisms of

participants, verbal interactions, levels of comfort observed through the process of discovering diagnosis and prognosis, and choices made along the path of the terminally ill patient. The observer also noted any unexpected reactions and decisions by participants during the course of the game.

Audio Recording

Audio recording was utilized during each gaming session to capture students' verbal interaction and reflections during the process of playing the game. Student comments were recorded and identified by the patients' name they were playing in the game. No identifiable information was recorded.

Student-Focused Review Interview

At the completion of the game, a focused review with open-ended questions was conducted face-to-face with participants by the observer. Even though they completed a post-game survey, the focus review offered time for interaction among participants and comparing decisions and choices made throughout the game. This interaction offered more data and contributed to understanding the effectiveness of the end-of-life game. See Appendix G for interview questions.

Faculty Survey

Nursing department faculty were invited to complete a short online survey. There were no face-to-face data collections with faculty. The purpose of this survey was to address obstacles to including end-of-life in nursing curricula, faculty reluctance to incorporate content on end-of-life, and options for educating on end-of-life and to inquire where an interdisciplinary experience would be best in curricula. See Appendix H for survey questions.

The Researcher's Role

Remaining objective during data collection and game playing was important due to the researcher's extensive background in end-of-life care; for this reason bracketing was used by the researcher. From this experience *The Path of Life: A Journey of Living at the End-of-Life* game evolved. Awareness of bias and preconceived ideas and interpretations of participant results was crucial. Keeping a journal before and during data collection proved helpful to offer a means of reflection and clarity to avoid bias. This included reflecting on the process of gathering data, assessing group members' reflections during and after playing the game, faculty concerns, personal bias on end-of-life education in nursing curricula, and the process of analyzing data.

Procedures

Procedures for gathering data from students and faculty were as follows.

Students

Students from one pre-licensure nursing school were invited to play *The Path of Life: A Journey of Living at the End-of-Life* game. After IRB approval from both Creighton University and Regis University and consent from the Regis University nursing school dean, a formal invitation was emailed to each student who had either completed or was currently enrolled in a community health course. Participation was voluntary. Once students replied to the formal invitation a time and date was confirmed to play the game. Each student assumed the role of a patient during the game. Student reactions and verbal comments were gathered via field notes and audio recording. Discussion following the game was accomplished with focused review questions.

Field notes and audio recording was done while each group played the game. Upon replaying the material it was noted that conversations were very slow and deliberate, making it manageable to gather information from each audio recorded session.

Faculty

The online faculty survey was comprised of four questions created in SurveyMonkey®. Only nursing faculty were included in this survey. After IRB approval from both Creighton University and Regis University and consent from the Regis nursing school dean an invitation was sent via email for voluntary participation in the survey. Data were downloaded from SurveyMonkey® for review.

Data Analysis Plan

Student information was translated in steps. Both pre-game and post-game survey results were transcribed onto a large poster board and color coded for similarities and differences based on questions and separated by specific surveys. Data were then compiled assessing each survey separately. Audio recording was personally assessed and information compared to field notes regarding participant responses during the game. Tables found in Appendix I compared student pre-game and post-game results, and Appendix J displayed student-focused review questions comparison.

Faculty information was sorted according to questions that were assessed and contextually evaluated. Themes that emerged within each question were sorted by colors. After assessing data, tables were created to demonstrate similarities and differences in results. Appendix K exhibited faculty survey results sorted by themes within each question. Faculty data were sorted according to questions, and themes were color coded as they emerged during review.

Verification

Verification includes various methods by which the researcher checks data for accuracy (Roberts, 2010). Triangulation occurred by comparing data between audio recording and field notes, student pre- and post-game surveys and student-focused review, and the different student groups playing the game. Clarifying research bias was accomplished with conversations with the dissertation committee. Member checking was achieved after playing the game through verbal communication with participants during their focused review sessions. No further member checks were done after the game was completed to maintain anonymity. Faculty member checks were not done to maintain anonymity.

Credibility and Transferability

It was important to assure *The Path of Life: A Journey of Living at the End-of-Life* game had credibility for educating nursing students on end-of-life content. Credibility was increased by using an audio recording device specific for a meeting or conference setting during gameplay, thus confirming first-hand information from students. During the game, responses and interactions between participants was slow, resulting in easier transcription of the recorded sessions. This also proved true with writing detailed field notes. Color coding of questions and themes assisted in assuring data was interpreted according to participants' responses. Faculty from only nursing schools participated, assuring the topic was focused on that specific curriculum. Through participants playing the game, survey results, and peer-reviewed journal articles on end-of-life education and the use of games as a teaching strategy, credibility of this case study research was

achieved. Student participant comments and audio recordings discussed the potential for end-of-life game education to transfer learned skills to the clinical setting.

Ethical Considerations

A variety of cultural and religious considerations were represented in the game and included in patient summaries. Not all cultures and religions were represented, which could result in an ethical issue. Perceptions and beliefs on death and dying varied with participants, creating conversation on this topic. Cultural differences were voiced, deciphering what was portrayed in the game compared to participants' perceptions. Choices made during the game elicited a variety of emotional discussions on end-of-life issues. Creswell (2013) discussed the possibility of participants choosing not to join in based on sensitive material. Many students did not respond to the invitation to play the game, and some were apprehensive before the game started because of personal beliefs.

All participants were informed of their rights, cost, benefits, risk, and voluntary participation through informed consent. No identifiable demographics were maintained for this research and results were kept confidential. All data were kept secure and password-protected with access for the researcher only. Data will be kept for three years then destroyed. Please see Appendix C for IRB approval and protocol number.

Summary

This chapter focused on the methodology of the qualitative case study on *The Path of Life: A Journey of Living at the End-of-Life* game. The purpose and aim of this study were documented. Discussion on why this research was essential was provided along with issues pertinent to this topic. The case study method was chosen for this project using *The Path of Life: A Journey of Living at the End-of-Life* game as the focus

of research. Nursing students and faculty were chosen for this study, and surveys were used to gather data. Audio recording and field notes added an additional source of data. Journal recording was essential to create awareness of biases that may have altered data results. Detail was provided regarding data collection and analysis. Data collection tools used in the study increased credibility and transferability. Ethical considerations were taken into account during the creation of *The Path of Life: A Journey of Living at the End-of-Life* game. This chapter covered many facets involved in gathering data and recording results in preparation of interpreting outcomes pertaining to end-of-life educational issues. Rationale for using the qualitative case study method was presented.

CHAPTER FOUR: FINDINGS AND THE EVIDENCE-BASED SOLUTION

Introduction

This chapter includes findings from surveys presented to pre-licensure nursing students and nursing faculty regarding end-of-life education. Student participation in playing *The Path of Life: A Journey of Living at the End-of-Life* game and surveys completed by both students and faculty were the basis of findings in this research study. The results of these findings led to the proposed solution to support the aim of the study.

Purpose Statement

The purpose of this qualitative case study was to assess the effectiveness of a game as a teaching strategy for end-of-life education in nursing curricula.

Aim of the Study

The aim of the study was to create an evidence-based end-of-life game as an alternative teaching strategy to engage nursing students in the process of choices and decisions patients make at the end of their lives. Ultimately, through playing the game as part of a comprehensive nursing curriculum student nurses will be more aware of the needs of the dying to provide best patient care.

Summary and Presentation of the Findings

This section will offer a comprehensive narrative review of findings from the surveys used during the study, audio recording, and field notes. Summaries from each survey will cover the major themes that evolved from participant input.

Results of Pre-Game and Post-Game Student Survey Comparisons

Students were given two surveys to complete, one prior and one at the conclusion of playing the game. No student had a recent personal death experience prior to playing

the game, yet more than half had cared for a dying patient in a clinical setting. Two questions included on both surveys were compared as shown in the figure in Appendix J. Pre-game results showed more than half the students felt unprepared yet slightly comfortable in caring for the dying. After completion of playing the game, there was a slight increase in comfort to care for the dying patient. All participants stated they were more prepared to care for the dying and most had increased knowledge as a result of playing *The Path of Life: A Journey of Living at the End-of-Life* game. These results addressed both research questions related to comfort and care proposed by the researcher.

The most beneficial aspects of playing the game noted by the students were awareness of choices at end-of-life, mindfulness of joy in life, and the use of shared reflection times during the game. One student stated that the most beneficial aspect of playing the game was “Being reminded that some of the best treatment is to have joy. Fixing them (patients) may not be the best treatment.” Another student’s comment was “realizing death was a more multifaceted complex process than I had thought of before.” A number of students remarked that they now understood the many choices people have to make as they are faced with a terminal disease.

Students offered improvements to the game. Students suggested the game should include more joy and treatment cards as well as increased patient demographic information at the beginning of the game. Suggestions were given related to the timing of receiving a joy or treatment card based on the board game layout and the choices written on the dice. Another suggestion was made to update patients’ statuses, letting players know if treatments failed or improved their conditions. One student stated. “This

would be a great simulation!” and “it would be a great interprofessional simulation.”

After playing the game, another student’s comment was “this is transferable to real life.”

Results of Student-Focused Review Questions

Students were given focused review questions to complete after the game ended. The questions were: 1) How did you choose the person you were going to play? 2) What emotion did you have when you read your major mortality event? 3) What emotion did you have when you found out your diagnosis? 4) What emotion did you have when you found out your prognosis? 5) What guided the choices you made as you progressed throughout the game of living? 6) In what way are you better prepared to care for the dying as a result of playing the end-of-life game? Discussion occurred between the researcher and students regarding their responses, which are discussed in this section. These questions pertained to the emotional effects of playing the game and factors that guided their decisions and choices for treatment and joy in the lives of the patients they were playing. Questions related to the patients’ mortality events, diagnoses, and prognoses prompted emotional responses from students. Sadness was mentioned as a response to all three questions; students also expressed anger, shock, regret, confusion, and being scared when faced with terminal situations.

After moving through sadness due to diagnoses and prognoses of patients, students’ reactions changed to happiness when a joy card was played. Students who received joy cards earlier in the game seemed to arouse envy in other students. Some would ask, “When will I get some joy!” When students rolled the dice and received a joy card, many smiled and showed increased enthusiasm for the patients they were playing. They returned back to enjoying their lives in spite of their current terminal conditions.

This was noted through researcher observation and students' verbal comments recorded as they played the game.

Results of Faculty Online Survey

Nursing faculty from three different schools participated in a survey created on SurveyMonkey®. There were a total of four open-ended questions. The questions were: 1) In regards to curricula what obstacles need to be addressed to include end-of-life more in curricula? 2) In regards to faculty reluctance what concerns do you have including end-of-life in nursing curricula? 3) In regards to end-of-life exposure for students, what possible options and alternatives do you see to educate students on end-of-life? 4) In what courses do you think end-of-life interdisciplinary experience would be best? A total of 23 faculty members responded to the survey. There were no face-to-face discussions between researcher and faculty regarding the game or survey questions. Themes arose within each question and were color-coded. Appendix K displayed faculty survey results.

Question one discussed obstacles faculty has integrating end-of-life education into curriculum. The top four themes were lack of faculty expertise on the topic, decreased comfort talking about end-of-life, content overload, and time constraints. A few comments from faculty were: "There is a lack of expertise among educators"; "the biggest obstacle is the limitation of time associated with the high volume of content required"; and "it's a topic nobody likes to address much less talk about."

Concerns regarding faculty reluctance had similar results as question one. Lack of expertise and not feeling comfortable with the topic were the main issues mentioned. Some respondents were not aware faculty was reluctant to teach end-of-life content. One faculty member stated, "I think faculty reluctance comes from their own lack of

knowledge and experience with the subject.” Another said, “It seems nursing educators shy away from lecture content which is challenging or they have little professional experience.” One faculty voiced concerns that encompassed many facets:

Many faculty have had no experience teaching this content and are uncomfortable with it in their assigned activities. Faculty are more concerned with being “politically correct”, or not wanting to offend or upset students and do not know how to discuss this topic in an objective manner. Faculty is doing a disservice to their students in not providing this content.

Question three was related to alternatives or options for student end-of-life exposure. Most suggested simulations, a few mentioned first-hand hospice experience, case studies, or a game, and interdisciplinary work on end-of-life care. Other suggestions included guest speakers with end-of-life experience, chat rooms, reflections, and panel discussions with experts in the field. Faculty comments included: “experiential learning through end-of-life simulation activities”; “[the game offered] interdisciplinary participation could be beneficial as students could share their thoughts and learn other views”; “simulation experience is one option as is gaming”; and “a game with options for family and patient related to medical options would give them some experience.”

The final question asked where course faculty thought an interdisciplinary end-of-life experience should be included within curricula. Answers to this question varied with strong opinions to include end-of-life education early, middle, or late in the program. Most nursing faculty answered regarding the need to include end-of-life in curricula and not specifically to offering this topic in interdisciplinary format. Suggested courses were ethics, community health, medical-surgical classes, pediatrics, critical care, geriatrics,

and “a little bit in each course.” One faculty member stated, “I think it should be a course in and of itself. It is such an important topic and one that should stand alone; it should not be muddied by other disease approach.” Another faculty comment was, “The more exposure students have to it, the better they will respond.”

Results of Audio Recording and Field Notes

Field notes and audio recording revealed questions and comments students discussed while playing the game, such as wondering how they would live with their disease, diagnosis, and prognosis if this were their life. Students questioned who would take care of them as they declined with a debilitating disease. Other concerns voiced by students related to how a patient lives with the diagnosis of a terminal disease and how he or she copes when presented with a limited prognosis. By putting themselves in the roles of actual patients, it made them think of the choices, decisions, and dilemmas a terminally ill patient faces.

Various facial expressions were noted while writing field notes when students verbalized the diagnosis for the patient they were playing in the game or heard other players' diagnosis. Excited expressions were apparent when students received a joy card. The author observed student movements in the chair, crossing arms, and facial expressions that correlated with voicing concerns that were not captured in the audio recording with an initial mortality event such as a lump in the breast or diagnosis and prognosis.

Certain themes were repeated in audio recordings that were on the surveys. Students voiced jealousy when other players received joy cards and they did not. “I want some joy in my life” stated one student. Students stated they became aware that patients

can enjoy life even while addressing the many choices and decisions they have when faced with a terminal disease. When students talked about the effect of playing the game, one stated, “this experience can be transferred to real life.” Another said, “they could still have joy even though it did not change the fact they had cancer.”

Other observations were made when writing field notes. Choices made when deciding treatment options varied with each player and case scenario. Students playing the patient with the heart attack always commented how relieved they were that they did not have the diagnosis other players had in their situations. They voiced less devastation and found a heart attack diagnosis less traumatic than one with cancer or other diseases presented in the game.

Analysis and Synthesis of Findings

Faculty agreed that end-of-life education needs to be included in nursing curricula. They are unsure how to deliver this sensitive topic and feel unprepared and inadequate in how to teach end-of-life care. They are stymied by time constraints and content overload. Faculty had varying thoughts on when and how to include end-of-life education in curricula.

Students voiced the need to include end-of-life education throughout nursing curricula. They felt ill-prepared to care for the dying and lacked knowledge regarding what a person encountered when faced with decisions at end-of-life. After playing *The Path of Life: A Journey of Living at the End-of-Life* game, students felt more prepared to care for the dying. It changed their perspective and reduced concerns by increasing knowledge on end-of-life. Playing the game also increased their awareness of decisions and choices patients make when they are faced with a terminal disease. Students stated

playing the part of a patient in the game gave them the awareness of emotions when making decisions and the ability to experience joy in their lives even in the face of their mortality.

Engaging students to assume the role of multiple patient situations and playing the end-of-life game led to an increased knowledge and awareness of end-of-life situations. Participating in this game helped students develop increased self-awareness, empathy, and knowledge regarding end-of-life issues. Patient situations incorporated emotional components and choices made at end-of-life. Through participation in this end-of-life case study interactive game, students experienced the emotional roller coaster of decisions made at end-of-life and choices for various situations. Using a game as an alternative teaching strategy for delivering this sensitive material increased discussions on end-of-life and student awareness of a patient actively participating in living at the end-of-life.

Many issues were apparent regarding the lack of end-of-life education in nursing curricula and the consequences this was having on nursing students. A solution needed to be found to remedy the problem that is relevant across the nation.

Proposed Solution

To address issues on end-of-life education from evidence-based literature, comments voiced by nursing students' surveys, participation in playing *The Path of Life: A Journey of Living at the End-of-Life* game, and faculty concerns regarding end-of-life education, a solution was created to increase content in nursing programs. Faculty issues of content overload, time to deliver course material, and lack of comfort and education on end-of-life issues were assessed. Students' concerns with lack of comfort to care for the

dying, education, and exposure to end-of-life issues were evaluated. Incorporating a game as a teaching strategy for representing end-of-life content was also evaluated. Multiple steps were required to compose and design a method for including this information in nursing curricula. This chapter describes those steps that were necessary to create a solution based on the needs of both students and faculty to ultimately provide a means to deliver best patient care.

Faculty Instruction

To best teach students on subject matter, faculty must personally acquire knowledge and understanding of a topic. Initially inviting faculty to participate in end-of-life education through playing *The Path of Life: A Journey of Living at the End-of-Life* game would offer them an opportunity to experience choices and decisions patients make at end-of-life, and also the joy they experience in spite of their disease processes. This would provide faculty a foundation on end-of-life education, and expose them to a teaching strategy that they could implement with their students. To provide consistent information among faculty members they all would be required to play the game to become familiar with its content. This could be the basis of a team-building experience during faculty development.

Preparing faculty by means of an expert is also a strategy. Offering faculty education by an End-of-Life Nursing Education Consortium-certified (ELNEC) nurse would provide increased levels of knowledge in all areas of end-of-life care. Combining the game and this education would provide faculty with a basic understanding of end-of-life issues.

Educating faculty through these methods could transfer knowledge to students in various courses throughout curricula. Once faculty members are educated, they could incorporate end-of-life information as appropriate into their courses. Focused end-of-life content could eliminate the concern of end-of-life education consuming more time as it would be relevant to students' subject matter and not separate material to teach.

Another solution could be implementing a course designed totally for end-of-life content. This material would be taught by faculty who have end-of-life experience or feel comfortable with the content after completing ELNEC training. The value of this solution would take pressure off faculty who feel there are time constraints and content overload in curricula. This would provide a class all students would complete to educate them on end-of-life topics. Relieving faculty concerns related to end-of-life issues will provide an avenue to offer content to students in a safe environment before they prepare to care for terminally ill individuals in the clinical setting.

Student End-of-Life Preparation

Major concerns from students were lack of end-of-life education and exposure as well as comfort in caring for the dying. Through faculty education and increased ease with end-of-life content, students could have exposure to information throughout their plan of study. Offering students an opportunity to assume the role of a patient and be exposed to decisions and choices patients make during a terminal illness was accomplished while playing *The Path of Life: A Journey of Living at the End-of-Life* game. The game included background information on the disease associated with the patient. The four diseases represented in the game were myocardial infarction, lung cancer, breast cancer, and Amyotrophic Lateral Sclerosis (ALS). Incorporating this game

in courses at any stage of curricula could provide students with increased comfort and awareness of end-of-life situations. This game could be an interactive learning session increasing team building and giving students an opportunity to learn from each other.

Creating the opportunity for students to experience end-of-life in the clinical setting can be difficult. Not all students are exposed to a hospice setting, yet they can be faced with death in any clinical rotation. Offering education on end-of-life throughout curricula increases student awareness for improved knowledge in practice and in clinical settings. Although death does not occur during all clinical rotations, preparing nursing students on end-of-life issues helps decrease anxiety and better prepares them when faced with a patient at end-of-life.

End-of-Life Game in Nursing Curricula

As a result of students playing *The Path of Life: A Journey of Living at the End-of-Life* game, they left with increased knowledge of end-of-life issues, felt more prepared to care for the dying, and, in some cases, were more comfortable with the thought of caring for the dying as evidenced by findings. Introducing end-of-life throughout nursing curriculum would benefit patients and families at end-of-life as students could apply knowledge and experience learned from playing the game.

Support for the Solution from Data Collected

The AACN (1998) stated there was a lack of end-of-life education in nursing curricula, and student surveys confirmed this void. The Institute of Medicine (2014) stated that there continues to be deficient education in nursing curricula and inadequate interprofessional collaboration on end-of-life education. Student feedback from playing *The Path of Life: A Journey of Living at the End-of-Life* game demonstrated how

effective a game could be as a teaching strategy for end-of-life content. Data illustrated an increase in student knowledge and readiness to care for the dying as a result of playing this game. As students assumed the role of patients during the game there was an increase in their awareness of decisions and choices patients make at end-of-life. These results supported the aim of this research study.

The faculty survey described time limitations, lack of end-of-life knowledge, and overcrowded curricula. *The Path of Life: A Journey of Living at the End-of-Life* game can be included in nursing curricula to offer faculty an alternative teaching strategy for this sensitive topic. The game can be customized to include content for specialized courses to enhance learning. Faculty development for end-of-life education can be accomplished through their playing *The Path of Life: A Journey of Living at the End-of-Life* game and with an ELNEC-certified nurse at nurse faculty meetings. Including this game in current content enriches subject matter and increases student learning on end-of-life. Faculty results also revealed interest in interdisciplinary education. *The Path of Life: A Journey of Living at the End-of-Life* game could be integrated to augment interdisciplinary education throughout curricula.

Existing Support Structures and Resources

An example of current support for additional end-of-life education is at Regis University in Denver, Colorado. There is an existing, evolving end-of-life interdisciplinary simulation that occurs when nursing students are in their community health course. Other participating disciplines include pharmacy, physical therapy and counseling. Faculty members participating in this simulation are open to examining alternative teaching methods for end-of-life content. Introducing the idea of a game to

instruct on end-of-life content may be welcomed by this interdisciplinary group of faculty. Through their influence and support there could be an increase in end-of-life education in multiple curricula.

Faculty was invited from various nursing schools to participate in the survey regarding end-of-life education. The survey was anonymous so it is uncertain which schools answered questions, yet it could be possible to contact the schools to utilize and evaluate the game. Presentation of the game by the designer would encourage other faculty to experiment with *The Path of Life: A Journey of Living at the End-of-Life* game in their curricula.

Nursing programs that incorporate simulations as a teaching methodology in nursing curricula may readily be open to including a game on end-of-life issues. Because of the lack of clinical exposure for end-of-life education, nursing programs could easily include this game in end-of-life simulation education.

Policies Influencing the Proposed Solution and Proposed New Policies to Ease Implementation

Current Policy

The AACN (1998) has outlined suggested guidelines for including end-of-life in nursing curricula. They mandated all undergraduate nursing students should attain end-of-life education according to the AACN outline (AACN, 1998). Although specific courses have been suggested, many schools still struggle to include end-of-life content and students are graduating unprepared to care for the dying. ELNEC was created to educate clinical nurses to provide end-of-life care and enhance instruction in nursing curricula. AACN's focus included a variety of topics such as general end-of-life

education, geriatrics, pediatrics, and critical care issues that are included in nursing curricula. Educating faculty who will transfer that knowledge to students will enable patients and families to experience a peaceful death, thus satisfying AACN and ELNEC guidelines.

Proposed Policy

Incorporating a policy to assure at least one faculty member would complete the ELNEC core competency would increase awareness for end-of-life education in each nursing institution. Another policy could be increased simulation use not only for students, but for faculty development using *The Path of Life: A Journey of Living at the End-of-Life* game. Using a game as a method for faculty development could enhance brainstorming and comfort amongst faculty on incorporating end-of-life content into nursing curricula. To pass accreditation, nursing schools need to provide more evidence of end-of-life education throughout curricula. Simulations including games and interdisciplinary experiences regarding end-of-life issues are all examples nursing faculty could incorporate across curricula.

Pre-licensure curricula committees in nursing education are involved in altering and approving any additions or deletions in nursing curricula. An in-depth proposal to include end-of-life issues across curriculum would be submitted to the committee for evaluation and discussion. This committee would compare and distinguish teaching methods and content on end-of-life across curricula through content mapping. Providing evidence to support the need for a proposal to include end-of-life education in nursing curricula would be essential. Data from this research and AACN recommendations

would provide direction and suggestions on the benefit of including end-of-life education in nursing curricula.

Faculty development committees could evaluate ELNEC training as an option for increased faculty end-of-life education. Nursing school deans could be approached for financial resources to ensure ELNEC training was provided in their nursing schools. Evidence to support ELNEC training effectiveness should be provided to support this nursing faculty development.

Potential Barriers and Obstacles to Proposed Solution

The faculty survey conducted in this research revealed struggles with content overload, time constraints, and lack of knowledge. There are workable solutions to each of these issues, yet some faculty may resist a topic they are uncomfortable with or are unable to visualize adding to their courses. Early adopters will embrace this change, yet laggards and rejectors will create barriers to implementation of end-of-life content throughout curricula (Rogers, 2003).

Faculty development is essential to delivering end-of-life content to nursing students. Lack of interest and participation could result in failure to implement an increase in end-of-life material across curricula. If senior leadership is not convinced end-of-life material is essential, faculty would not be obligated to receive increased training on this topic. Preparing pre-licensure students for National Council Licensure Examination (NCLEX-RN) is essential for nursing students. Faculty may prioritize content based on assumptions about the exam and end-of-life material may not take precedence.

Financial Issues Related to Proposed Solution

Designing a game can be time consuming and costly. Budget constraints can impede purchasing any supplementary teaching material. Considerations to allot spending for an end-of-life game may not be seen as an educational investment if gaming is considered only entertainment. The only way to realize a return on investment would be increased student preparedness for caring for the dying and faculty satisfaction with the new teaching strategy. Results from this research could be a beginning of increasing awareness for the need of additional end-of-life teaching tools.

The Path of Life: A Journey of Living at the End-of-Life game could be duplicated by the designer as a teaching strategy for nursing schools to use throughout their curricula. Multiple game boards could be utilized by faculty at one time so all students could play the game during a particular session. Patient scenarios currently used in the game could be modified by the designer to include specific disease processes, cultural considerations, and ethical issues pertinent to course content which could enhance student learning. *The Path of Life: A Journey of Living at the End-of-Life* game would offer faculty an alternative teaching strategy to improve end-of-life education in nursing curricula. Each organization would have to assess its commitment to increase end-of-life education in its nursing schools. A desire to address AACN end-of-life requirements and current individual school accreditation statuses could potentially encourage considering an alternative teaching method such as *The Path of Life: A Journey of Living at the End-of-Life* game.

Legal Issues Related to Proposed Solution

Possible legal issues could pertain to ethical and cultural considerations in end-of-life education. The game is currently limited in providing a multitude of cultural and ethical topics due to limited patient scenarios. Although this could be remedied as the game is expanded, initially some may take offense to this omission.

Discussion of end-of-life can be emotionally challenging depending on past experience and reactions while playing the game. Student consent included referral information for counseling if needed as a result of playing the game. Some players could potentially state the game caused mental and emotional harm, which would lead to legal ramifications.

Change Theory

Change can be exciting for some, yet others may not always receive it with enthusiasm. Burke (2011) stated there are different reactions to change and the process itself does not always flow as intended. Proposing change to engage others rather than forcing a change can create a more successful outcome. Students desire end-of-life education as evidenced from surveys and literature. They are asking to be more prepared to care for the dying as they enter the professional world of nursing. Students, as well as terminally ill patients and families, are stakeholders in this educational change process. Implementation of change to increase end-of-life education in nursing curricula depends on nursing leadership and faculty to accept this content as essential. The approach to increasing awareness of the importance of end-of-life content will determine the effectiveness of change.

The change model necessary to ensure acceptance and implementation of increased end-of-life content in nursing curricula is Rogers's Innovation-Decision Process (Rogers, 2003). The steps in this process demonstrate how including increased end-of-life content in nursing curricula could be implemented. The steps are: knowledge, persuasion, decision, implementation, and confirmation.

Knowledge

Increasing faculty knowledge of the necessity of end-of-life education is the beginning of change. Offering education on this topic would be essential to create comfort and understanding of end-of-life issues. It is pertinent to determine the level of understanding of the many facets of end-of-life care known by faculty members. This could be accomplished in round table discussions to collect information on what is known as end-of-life care and what education they would require to increase their level of knowledge. Rogers (2003) discussed various types of knowledge. Awareness-knowledge that end-of-life issues are important in nursing curricula; how-to-knowledge determining what is necessary to incorporate end-of-life education in nursing curricula; and principles-knowledge evaluates the means to implementing end-of-life education in courses across curricula. These areas are necessary to understand to move into the persuasion stage.

Persuasion

Faculty members look to evidence-based literature to determine topic feasibility. This could be accomplished by providing an informative session for faculty following round table discussions. Group question-and-answer periods could determine what aspects of end-of-life need further clarification to increase faculty understanding. Rogers

(2003) emphasized each individual's part in analyzing and confirming that there is a need for increased end-of-life education in nursing curricula. Once he or she personally discerns that end-of-life information is essential to nursing curricula, and begins to move towards examining its place in the courses he or she teaches, the group can move into the decision phase.

Decision

Faculty will either accept or reject the decision to increase end-of-life content in nursing curricula. Rogers (2003) discussed a decision to accept or reject a proposal can occur in any stage. Culture can also play a part in the decision-making process. Individual cultural considerations and the culture of the faculty group could shift a decision from acceptance to rejection. This factor could be addressed in any stage of the innovative-decision process to clarify concerns that might impede decision making.

Implementation

Once the decision has been made to accept an innovation, the process of implementation occurs. Rogers (2003) stated this can be delayed when many people are involved in the decision making, such as the nursing faculty versus one individual. To incorporate end-of-life education in nursing curricula there may be multiple steps before full implementation occurs. Educating faculty is essential for the process to be successful. Mapping out courses to assure end-of-life content is instituted across curricula can be time consuming, yet essential for the success of the program. Instilling alternative teaching methods such as using *The Path of Life: A Journey of Living at the End-of-Life* game would be assessed for where they most appropriately fit in curricula.

Confirmation

This confirmation section may solidify the decision made for including or rejecting additional end-of-life education in nursing schools. The option to reevaluate the decision and either reject or adjust prior decisions depends on how well it was adapted. Rogers (2003) stated, “Innovations that have a high rate of adoption should have a low rate of discontinuance” (p. 191). Because simulations are currently used in many nursing programs the addition of *The Path of Life: A Journey of Living at the End-of-Life* game may prove successful. This stage may be the time to adjust in which course the game is played and continue faculty education as needed to support instructors in their role of end-of-life education to nursing students. Effectiveness of this change process can be dependent on the two initial steps of knowledge and persuasion that could be revisited during the confirmation state.

Organization change can involve many steps and time to achieve the goal. Lowney (2003) mentioned skills of a leader to include “the ability to adapt, create, and respond quickly...” (p. 149). To increase end-of-life education in nursing curricula, and provide faculty with the education and tools to deliver this instruction, requires these decisions move forward to accomplish student preparation to care for the dying. To expedite diffusion of innovation regarding end-of-life in nursing curricula, perseverance and strong leadership will be required to guide the process.

Internal/External Issues Related to Proposed Solution

Issues outside of nursing schools may drive the proposed solution for an increase in end-of-life education in nursing curricula or dampen the initiative. Leadership will play a key role in assuring that nursing students have the proper education to care for the

dying. Faculty will also need support to acquire the needed instruction and teaching strategies to implement the proposed solution.

Possible Interference in Implementing Curricular Change

There are several influences that may affect curricular change. Higher education has rising costs and expenses and more students are taking classes free through Massive Open Online Courses. Although there will always be a demand for nurses, how they will be trained may change over time. Nursing education has gone from hospital diploma programs to associate degree programs to an increasing demand for only baccalaureate-prepared nurses. There is increased demand for clinical sites, resulting in less hands-on learning in acute care settings and more simulations. Delivery of health care is also changing with the creation of the Affordable Care Act. Rural health is in need of more healthcare providers to offer optimum health.

As the world is changing there will still be a need for nurses to care for the dying. The baby boomers are aging and will create the greatest need and demand for healthcare. There will be an increased demand for nursing faculty as this generation retires. If nurses lack education on end-of-life care they will not be able to pass this information on to new graduating students. Fifty-five percent of hospitals are unprepared for the high turnover and vacancies due to retirements (National Solutions, Inc., 2015). AACN stated it was predicted between 200-280 eligible masters- and doctoral-prepared faculty members are nearing retirement (AACN, 2005). Between the shortage of nursing faculty and practicing nurses, and unprepared nursing students to care for the dying, it is critical that current faculty be trained to educate students on behalf of the dying.

Another issue for change is the consideration of the net generation. They have grown up with computers and the internet and have answers to questions almost immediately. How they learn has depended on what they can glean from their computers or cell phones. As classrooms change to include more online education this generation may miss the personal interaction required to care for patients, especially the dying.

The leader of today needs to evaluate all the possible changes mentioned and assess how they will impact the increased need to assure students are educated on end-of-life issues. Lowney (2003) stated, “A leader seizes all of the available opportunities to influence and make an impact” (p. 18). As *The Path of Life: A Journey of Living at the End-of-Life* game is duplicated, an internet version will be created to engage more students, yet not sacrifice the affective learning included in the board game. More online education on end-of-life will be utilized to educate both faculty and students. Increasing numbers of faculty educated by an ELNEC nurse in all areas of the country will increase the chances of effective end-of-life care for the dying. A person in a leadership role will benefit from using the Jesuit four leadership pillars described by Lowney (2003): self-reflection, ingenuity, love, and heroism. Although challenges may prevail as a proposed solution is introduced, leaders who continue to reflect on the world around them and the needs of others through a lens of ingenuity, love, and heroism will overcome obstacles and make way for the proposed solution to be utilized. A statement by Lowney (2003) that can refer to leadership required to overcome obstacles and introduce new ideas was “always ready to respond to emerging opportunities” (p. 29).

Summary

This chapter reviewed the findings from the data collection and implemented a solution to the problem and need for educating nursing students on end-of-life education.

Results of Findings

It was evident from student surveys there was an increase in knowledge and preparedness to care for the dying as a result of playing *The Path of Life: A Journey of Living at the End-of-Life* game. Students answered the researchers' questions emphasizing the positive effect the game had on participants related to increased end-of-life understanding. Knowledge gained included empathy for the dying, awareness of the many decisions and choices a person with a terminal disease makes throughout his or her end-of-life journey, and the importance of including joy in one's life in spite of a terminal illness.

Aspects of the game that helped the students feel more prepared for practice were role playing the patients as they played the game; decision making and choices utilizing treatment and joy cards; empathy with patient situations of the terminally ill; and learning from other students' reflections while playing the game. One student's comment regarding playing the game was the realization that "some of the best treatment is to have joy, fixing them is not always the best treatment."

Faculty surveys revealed time constraints, lack of end-of-life education and experience, and overloaded curricula blocked interest in including another topic into curricula. They offered suggestions on skilled end-of-life nurses or an expert panel presenting material to nursing students. Faculty also suggested a variety of times to include end-of-life education from early, middle, and later in curricula. Some did not feel

resistance was the issue preventing including end-of-life content in curricula but time, content overload, and lack of experience with the topic.

Solutions to the Problem

Many solutions were explored to increase end-of-life education in nursing curricula and address faculty reservations. Faculty education as a team-building opportunity presented by an ELNEC-trained nurse would offer an opportunity to increase knowledge of end-of-life issues. Another solution was for faculty members to play *The Path of Life: A Journey of Living at the End-of-Life* game. This could offer another chance for team building and experiencing a teaching tool available to them for instructing students on end-of-life issues. To support faculty members in choosing where to put end-of-life content in their courses, open discussions could be offered to increase the probability that they would include the material since they would be making it relevant to their class content.

Leadership strengths were offered to address opportunities and obstacles to implementing the solution. Legal and social barriers were explored. As leaders embrace the four pillars of leadership they will overcome difficulties and introduce new ideas for end-of-life in nursing curricula since they are “always ready to respond to emerging opportunities” (Lowney, 2003, p. 29).

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to evaluate *The Path of Life: A Journey of Living at the End-of-Life* game as a teaching strategy for instructing nursing students on end-of-life issues. Students who played the game also completed various surveys, and data were gathered on the game's effectiveness as a teaching tool. Faculty voluntarily completed an online survey regarding different aspects of end-of-life education and elements that impede content in curricula. Results revealed a lack of end-of-life education in nursing education and a need for increased support and training for faculty to implement this topic throughout curricula.

Conclusions, implications, and recommendations as a result of this research will be discussed. Solutions proposed involved faculty education on end-of-life and evaluating options for teaching strategies on end-of-life issues. Student solutions revolved around possibilities for end-of-life exposure while in nursing school in preparation for caring for the dying. There is an increasing need for end-of-life nursing preparation and this research offers options and possible solutions to fulfill this need.

Summary of the Study

We have an aging population, and a responsibility to care for these people as they reach the end of their lives. A major problem that exists is the lack of end-of-life education in nursing schools around the country resulting in unprepared nurses to care for the dying. Faculty has insufficient experience and instruction on end-of-life issues to train nursing students on this important aspect of care. By assessing their concerns, this

research created an end-of-life game as an alternative teaching strategy, developed a methodology for research, surveyed both faculty and students, and arrived at a solution.

Purpose Statement

The purpose of this qualitative case study was to assess the effectiveness of a board game as a teaching strategy for end-of-life education in nursing curricula. It appears the use of *The Path of Life: A Journey of Living at the End-of-Life* game was an effective way to teach nursing students end-of-life care.

Aim of the Study

The aim of the study was to create an evidence-based end-of-life game as an alternative teaching strategy to engage nursing students in the process of choices and decisions patients make at the end of their lives. Ultimately, through playing the game student nurses will be more aware of the needs of the dying to provide best patient care.

Methodology

A qualitative case study was the basis of this research. *The Path of Life: A Journey of Living at the End-of-Life* game was created to engage students in end-of-life issues and to evaluate its effectiveness as a teaching strategy. They completed pre-game and post-game surveys and a focused review discussion. Saturation was met at nine participants. Students voluntarily consented to play the game.

Twenty-three nursing faculty members voluntarily completed an online survey. Questions related to obstacles of teaching end-of-life in curricula, faculty reluctance to teaching end-of-life content, possible options to include end-of-life in curricula, and determining an appropriate course for an interdisciplinary experience on end-of-life care.

Major Findings

Student results revealed increased knowledge on end-of-life and feeling more prepared to care for the dying after playing *The Path of Life: A Journey of Living at the End-of-Life* game. By students assuming the role of a patient during the game, they experienced decisions and choices a patient makes at end-of-life.

Faculty comments related to time constraints, content overloaded, and lack of experience or training on end-of-life issues. They suggested content experts deliver end-of-life care to students, offer multiple settings to expose students to end-of-life care, create simulations, and moderate expert panel discussions for student education.

Engaging students to assume the role of multiple patient situations and playing the end-of-life game led to an increased knowledge and awareness of end-of-life situations. Participating in this game assisted students in developing increased self-awareness, empathy, and knowledge regarding end-of-life issues. Patient situations incorporated emotional components by including choices for treatments and joy in one's life while faced with a terminal disease. Through participation in the end-of-life case study interactive game, students experienced an emotional roller coaster as they were faced with decision making in their situations. The *Path of Life: A Journey of Living at the End-of-Life* game increased discussions on end-of-life issues between students and researcher on this sensitive material. Through playing the game student awareness of patient needs at the end-of-life increased in preparation of real-life situations.

Proposed Solutions

ELNEC-trained nurses could educate faculty on end-of-life issues to better prepare them to deliver content to students. Faculty members could also play *The Path of*

Life: A Journey of Living at the End-of-Life game as a team-building exercise during faculty development. This would offer them an opportunity to personally experience decisions and choices patients make at end-of-life. A pre-licensure committee could complete mapping of courses to assess where end-of-life content was in curricula. Faculty could discuss best options for interdisciplinary experiences on end-of-life, including the best course to incorporate *The Path of Life: A Journey of Living at the End-of-Life* game. Through these proposed solutions there would be an increase in end-of-life education for nursing students to prepare them for caring for the dying.

Implementation of Solution Processes and Considerations

This research has not been implemented, yet the solution process and considerations are discussed in this section. This process could offer nursing school guidelines for implementation.

Roles and Responsibilities of Key Players in Implementation

The nursing school dean is a key player in implementing the solutions. Having a dean's approval to include end-of-life content in curricula would be a first step. The dean would also have financial considerations to evaluate such as purchasing the game or inviting outside experts to educate faculty or planning for faculty development.

Pre-licensure curriculum committees could be involved to assess options for including end-of-life instruction in curricula. This would be accomplished through the process of mapping each course for end-of-life content and examining any overlap or gaps.

Nursing faculty members are key players. Crucial factors to the success of this endeavor include their willingness to be trained on end-of-life care and to transfer this knowledge to students through course content.

Leader's Role in Implementing Proposed Solution

A leader would be committed to the implementation of increased end-of-life education in nursing curricula. The leader would have an understanding of the proposed solution and would recruit nursing faculty champions on this endeavor.

This work would be possible by one who is a servant leader and exemplifies the qualities of listening, foresight, and persuasion (Spears & Lawrence, 2002).

Considerations the leader needs to address before implementation are the concerns voiced in faculty surveys: time constraints, content overload, and lack of experience or education on the topic of end-of-life education. To increase end-of-life education for nursing students, the impact of these issues on faculty participation would need to be analyzed. This process could be accomplished through brainstorming at round table discussions during faculty development sessions. The leader and champion faculty would design a plan to overcome identified obstacles and begin to propose and design appropriate flow of end-of-life content in nursing curricula.

The leader would be committed to end-of-life educational needs and assure both new and experienced faculty would possess the didactic and affective information needed to instruct on this topic. Attributes of continued listening and persuasion by the leader would support implementation of end-of-life content in nursing curricula.

The Path of Life: A Journey of Living at the End-of-Life game was an alternative teaching strategy used in this research that was found effective for teaching students end-

of-life content. Introducing faculty to this game could open conversation to evaluating alternative strategies for end-of-life education. The leader would be pivotal in implementation of end-of-life education by offering continued support to faculty and utilizing his or her ability to convince others this content is an essential element of nursing curricula. Continued contact with faculty and measuring effectiveness of implementation would be essential for the overall success of including end-of-life in nursing curricula.

Evaluation and Timeline for Implementation and Assessment

Introducing end-of-life education in nursing curricula must be a thoughtful process. Assuring that faculty have completed end-of-life training and are comfortable and competent in content prior to including material in courses would be important before implementation occurred. Instituting specific times to include end-of-life content throughout curricula can vary depending on whether it was started at the beginning of a school year or the start of a new cohort. The purpose of this process would ensure consistency of course material throughout the year. If the plan is to incorporate end-of-life material in all courses, implementing in phases would be the best solution. This would offer faculty time to evaluate effectiveness of teaching strategies and make necessary changes before adding content to additional courses. A challenge for faculty would be teaching courses with and without end-of-life content until the whole curriculum had incorporated subject matter into each class. The timeline for this process would evolve over one year.

The first step to implement end-of-life education would be evaluating the nursing program for current instruction on end-of-life issues. Input from all faculty on courses

they teach and pre-licensure committee content mapping would determine where content is lacking. To begin conversations on options for teaching end-of-life in nursing curricula, assessing teaching strategies for classes that included end-of-life content would be beneficial.

Providing faculty evidence-based rationale and the necessity for including end-of-life content in nursing courses could offer an effective means to promote change in one's organization. This would be the next step in implementation. Faculty would review sources individually. Then faculty development meetings would offer round-table discussions on end-of-life educational techniques. ELNEC training would provide faculty the necessary preparation as the organization begins to implement content into curricula.

Conversations need to occur regarding issues and obstacles faculty anticipate when implementing end-of-life content. Change can be difficult. To continue trust and cooperation with faculty during this phase, leadership must provide empathy and good listening skills to assure everyone is adjusting to altered curricula.

The next phase would be actual implementation into courses. A community health course may cover hospice care, so incorporating *The Path of Life: A Journey of Living at the End-of-Life* game would be appropriate for this class. Integrating interdisciplinary education in this course and utilizing the game as a teaching strategy would offer training for various disciplines. End-of-life education can be assimilated into any course without additional time. *The Path of Life: A Journey of Living at the End-of-Life* game could be beneficial for interdisciplinary simulations on end-of-life issues.

Discussing end-of-life during conversations on disease processes or other subjects will increase knowledge and better prepare nursing students to care for the dying.

Convincing Others to Support the Proposed Solution

Support for the proposed solution is essential. Resistance can occur when faculty members anticipate an increase in both content and time to implement and evaluate another subject required in curricula. Convincing them to add end-of-life content may be a challenge. Faculty members responded to the online survey by stating that they already had extensive content to cover in courses.

Other stakeholders are nursing students, patients, and families. Students are requesting end-of-life instruction to increase comfort and knowledge when at the bedside of the dying. With an aging population there will be a greater need for competent care at end-of-life. This will pressure nurses to be more competent in the area of end-of-life care and increase the demand on faculty to include content in curricula.

The leader can facilitate faculty playing *The Path of Life: A Journey of Living at the End-of-Life* game to alleviate doubt of incorporating games into curricula. Gaining personal experience on the content within the game can enable faculty to begin conversations on end-of-life and feel more at ease with subject matter.

Faculty with end-of-life experience could utilize expert power to persuade and support others through this transition (Robbins & Judge, 2012). The power of persuasion can be employed by assisting faculty to personally realize the need for end-of-life education through evidence-based readings. There is a greater chance of faculty buy-in when it understands the rationale for implementation of end-of-life in nursing curricula.

Resistance may occur, yet the effectiveness of buy-in will be determined by how leadership can persuade others regarding the necessity of end-of-life content in nursing curricula. It would be beneficial to include reflective practice for faculty as end-of-life content is being considered for nursing curricula. Educating faculty on various reflective practices could minimize resistance. Anticipatory reflection occurs in preparation for an experience (Dickel, 2011). Allowing time to reflect and discuss concerns about including end-of-life material in nursing curricula would benefit faculty as it goes forward to implement end-of-life education. As faculty members begin to implement content, in-the-moment reflection would be helpful to identify their thoughts and feelings as they institute end-of-life in one of their classes (Dickel, 2011). As a servant leader, listening would continue to be vital to the success of this endeavor. Critical reflection is an appropriate reflective practice for this end-of-life topic (Dickel, 2011). This process emphasizes “improving the quality of life of disadvantaged groups” (Dickel, 2011, p. 6). The dying are a vulnerable population. Faculty has a responsibility to promote end-of-life education through curricula on behalf of this group.

Critical Pieces Needed for Implementation and Assessment

Funding a new initiative in nursing curricula can be challenging. Funds to purchase copies of *The Path of Life: A Journey of Living at the End-of-Life* game would be essential. Once copies were purchased there would be no further expense unless a specific patient scenario would be requested. Leadership would need funds to educate faculty by an ELNEC-certified nurse. If the university was fortunate to have faculty with this certification it could provide education as part of its assigned duties or as overload. Monthly faculty development meetings and individual team meetings would be important

to assess the effectiveness of implementation of end-of-life content in nursing curricula. Interdisciplinary education on end-of-life would benefit all participants. This knowledge would provide necessary information that could be transferred to the clinical setting to improve patient care for the dying.

Internal and External Implications for the Organization

Educating nursing students and other disciplines is only the beginning of improving care for the dying. Increased recognition in the community for nursing schools addressing the needs of this vulnerable population could benefit the institutions' clinical placements and accreditation standing. An institution could be a role model for other nursing schools as increased students and community satisfaction improves. Faculty recognition could result from positive classroom engagement and preparation to care for the dying.

On a larger scale, AACN could recognize *The Path of Life: A Journey of Living at the End-of-Life* game as an effective teaching strategy to be implemented in all nursing curricula. Hospice organizations, nursing homes, home health, and hospitals would have increased end-of-life care as a result of nursing education. Through exposure to the game and other teaching strategies they could request education for their staffs to assure optimal care for the dying population.

Implications and Considerations for Leaders Facing Implementation of Proposed Solution

The designer has the possibility of duplicating *The Path of Life: A Journey of Living at the End-of-Life* game. This could benefit many nursing students and end-of-life

patients across the country. There could be a conflict of interest if the game was purchased to be implemented where the designer was employed.

Ethnic and cultural groups not represented in the game could be a concern. Adding a possible disclaimer about these issues with the game could be a solution. Another issue could arise regarding various cultural beliefs at end-of-life. Offering additional material on this topic could be a possible solution to avoid conflict.

Evaluation Cycle

An evaluation cycle is necessary for continued success of implementing end-of-life education in nursing curricula and using *The Path of Life: A Journey of Living at the End-of-Life* game as a teaching strategy. The initial evaluation would be completed after the first class implemented end-of-life instruction through playing the game. Further delineation of material involved in a class would be evaluated such as whether the game was played in that course, if the class was interdisciplinary, and whether it was taught by a hospice expert or a newly trained end-of-life faculty member. This information would be necessary to assess the direction for the next course. Evaluation would be completed at the conclusion of each end-of-life class for the first year. Faculty members would share information from their classes through round table discussions. Results would be kept by the leader and discussed at each faculty meeting for further learning.

Faculty evaluation would be necessary regarding competency of content, and the ability to integrate end-of-life instruction with other course material. This would be completed through personal discussions with the content expert and one-on-one conversations during break-out sessions at faculty development during the first year of

implementation. The leader would keep a record of faculty comments for further evaluation.

Effectiveness of *The Path of Life: A Journey of Living at the End-of-Life* game would be evaluated by student comments. The survey questions used in this research would offer faculty members a guideline for evaluating student input regarding this teaching strategy in their classrooms. The leader recording this information for the first year would offer feedback and direction for future implementation of this teaching strategy.

Summary of the Study

This study evolved with an awareness of an aging population and an increasing need to educate nursing students on end-of-life issues. Survey comments from faculty revealed issues of time constraints, content overload, and lack of either experience or education on end-of-life material. Various suggestions were made by faculty about when to offer end-of-life interprofessional education and which classes should include instruction on this topic.

Findings from students demonstrated how effective a game could be in teaching them end-of-life content within one hour. Comments from students supported the use of *The Path of Life: A Journey of Living at the End-of-Life* game as a fun way to learn end-of-life education and to realize a person could enjoy living life even when faced with a terminal disease. They also suggested the game would make a great interdisciplinary experience. Students commented that they felt more comfortable and prepared to care for the dying as a result of playing the game, and the skills learned while playing the game could transfer to the clinical setting. Suggestions made by students to improve the game

were to increase treatment and joy card options and expand on the patient case scenario information.

Providing faculty end-of-life education prior to implementation would be necessary for the success of the program. This would be accomplished through education provided by an ELNEC nurse educator and faculty participating in *The Path of Life: A Journey of Living at the End-of-Life* game. Implementation would occur in stages, one course at a time over a year throughout a designated nursing cohort. To begin the evaluation process, faculty would use in-the-moment reflection to provide personal insight into the effectiveness of its teaching on this topic. Faculty development time would offer another opportunity to assess faculty effectiveness on delivering end-of-life content and the use of *The Path of Life: A Journey of Living at the End-of-Life* game in the classroom. The evaluation process would continue after the completion of each course throughout the year.

Offering end-of-life content in nursing curricula by playing *The Path of Life: A Journey of Living at the End-of-Life* game will prepare students to care for the dying. There is a responsibility for faculty to provide this needed education to better serve this vulnerable population. *The Path of Life: A Journey of Living at the End-of-Life* game is an alternative teaching strategy to accomplish this goal.

Implications/Recommendations for Further Research

The significance of this study provided an additional tool for faculty to use for teaching end-of-life material in nursing curricula. *The Path of Life: A Journey of Living at the End-of-Life* game was successful in educating nursing students on end-of-life issues, and offered faculty an optional teaching strategy for this sensitive topic. By

playing this game in nursing curricula, requirements for AACN are met and students are more prepared to care for the dying.

Increased faculty education on end-of-life issues could benefit the learning experience of nursing students on end-of-life education. Training at least one faculty member to become certified as an ELNEC nurse would offer an increased possibility of continued faculty development on this topic.

Further research would include using *The Path of Life: A Journey of Living at the End-of-Life* game as an interdisciplinary educational experience. This would prepare all disciplines with the necessary information to work as a team when caring for the dying. Increasing patient scenarios to include information from all nursing topics would encourage using the game throughout curricula.

Adjusting patient scenarios in the game to include more detail for the seasoned nurse could offer an opportunity to provide increased education in hospitals and other health care settings. *The Path of Life: A Journey of Living at the End-of-Life* game could be used for team building and continued education credits for nurses and other disciplines.

The Path of Life: A Journey of Living at the End-of-Life game was the beginning of transforming end-of-life education in nursing curricula. There are many possibilities to educate health professionals and ultimately assure adequate care for the dying. It is our responsibility as nurses to educate ourselves and our students on end-of-life issues, and face the reality of an increasing aging population awaiting optimum care as it transitions through the dying process.

Summary

End-of-life education in nursing curricula is essential to prepare students to care for the dying, yet is lacking in nursing curricula. *The Path of Life: A Journey of Living at the End-of-Life* game was found to be successful as an alternative teaching strategy for nursing faculty. Implementation would occur over a year to gradually increase faculty comfort with this content and evaluate the effectiveness of the teaching strategy. An interdisciplinary experience would be beneficial through integrating *The Path of Life: A Journey of Living at the End-of-Life* game. As our population is aging, nursing faculty have a responsibility to educate students to care for the dying. This research is valuable to educate faculty and students by providing end-of-life education in nursing curricula. *The Path of Life: A Journey of Living at the End-of-Life* game is an alternative teaching strategy to empower nursing students with the necessary education to serve the dying.

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Appendix A

The Path of Life: A Journey of Living at the End-of-Life game



Appendix B

Invitation to students

Dear nursing students,

My name is Carolyn Ackerman and I am a doctoral student at Creighton University. I am conducting research on “Gaming as a Teaching Strategy for End-of-Life Nursing education”.

The purpose of this letter is to invite you to participate in the game. Total time expected for completing surveys, interviews and paying the game is expected to last one hour.

There are no expected risks involved yet if minor emotional issues occur as a result of participating in the game I am prepared to offer emotional support. If more assistance is needed you will be referred to Regis University Student Health Services at 303-458-3558.

Benefits from gathering information from participants are for improved end-of-life education for nursing students. All information will remain confidential. There will be no participant identifiable information recorded. Your permission is needed for audio recording of data during participation in the game. All data will be securely stored in a computer drive only viewed by the researcher. Once data has been recorded, information will be destroyed. You may refuse to participate in the game or stop participating at any time during the study. You will not receive any monetary compensation or extra credit for your participation in this project.

If you have any question about your participant rights, you should contact the Regis Institutional Review Board at 303-458-4206 or email at irb@regis.edu. The following outlines participants' bill of rights:

Bill of Rights for Research Participants

As a participant in a research study, you have the right:

1. To have enough time to decide whether or not to be in the research study, and to make that decision without any pressure from the people who are conducting the research.
2. To refuse to be in the study at all, or to stop participating at any time after you begin the study.
3. To be told what the study is trying to find out, what will happen to you, and what you will be asked to do if you are in the study.
4. To be told about the reasonably foreseeable risks of being in the study.
5. To be told about the possible benefits of being in the study.
6. To be told whether there are any costs associated with being in the study and whether you will be compensated for participating in the study.
7. To be told who will have access to information collected about you and how your confidentiality will be protected.
8. To be told whom to contact with questions about the research, about research-related injury, and about your rights as a research subject.
9. If the study involves treatment or therapy:
 - a. To be told about the other non-research treatment choices you have.
 - b. To be told where treatment is available should you have a research-related injury, and who will pay for research-related treatment.

If you have questions concerning this research project before participating in the game, please direct your calls to Carolyn Ackerman at 303-476-8665. You may also

email me at cackerman@regis.edu or carolynackerman@creighton.edu. You have the right to withdraw from participation at any time without any adverse effects or consequences. Filling out the survey is acknowledgment of your agreement to participate in the study.

Thank you for your consideration in participating in the end-of-life game. You will be contributing to the increased knowledge and understanding of end-of-life care for nursing students.

Sincerely,

Carolyn Ackerman EdDc MS RN CHPN

Appendix C

IRB approval



REGIS
UNIVERSITY

Academic Grants

3333 Regis Boulevard, H-4
Denver, CO 80221-1099
303-458-4206
303-964-5528 fax
www.regis.edu

IRB – REGIS UNIVERSITY

February 16, 2015

Carolyn Fricke
3333 Regis Boulevard, G-8
Denver, CO 80221

RE: IRB #: 15M-15009

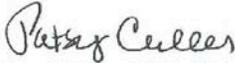
Dear Ms. Fricke:

The amendment to your original Regis IRB application, “Gaming as a Teaching Strategy for End-of-Life (EOL) Nursing Education”, was approved on February 5, 2015.

You have one year from this date of approval to complete the project. It is the responsibility of the investigator to maintain the submitted surveys (since submissions are done confidentially and without subject identifiers) for a period of three years after the conclusion of the research. The Office of Academic Grants does not retain copies of individual IRB documentation, including approval letters, past three years from approval date.

We wish you the best on your project!

Sincerely,


Patsy McGuire Cullen, PhD, PNP-BC
Chair, Institutional Review Board
Professor & Director
Doctor of Nursing Practice & Nurse Practitioner Programs
Loretto Heights School of Nursing
Regis University



Social Behavioral Institutional Review Board
2500 California Plaza • Omaha, Nebraska 68178
phone: 402.280.2126 • fax: 402.280.4766 • email: irb@creighton.edu

DATE: February 16, 2015

TO: Carolyn Ackerman (Fricke), EdDc
FROM: Creighton University IRB-02 Social Behavioral

PROJECT TITLE: [680911-2] Gaming as a Teaching Strategy for End-of-Life Nursing Student Education

REFERENCE #: Exempt Category #2

SUBMISSION TYPE: Amendment/Modification

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: February 16, 2015

Thank you for your submission of Amendment/Modification materials for this project.

The following items were reviewed in this submission:

- Application Form - Application for Request for Modification of Approved Research (UPDATED: 02/16/2015)
- Questionnaire/Survey - Modification form-faculty survey (UPDATED: 02/16/2015)

This revision and additional survey does not change the exempt determination and therefore the project may continue with the changes noted on this submission.

If you have any questions, please contact Patsy Nowatzke at 402-280-3586 or nowatzke@creighton.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Creighton University IRB-02 Social Behavioral's records.

Appendix D

Invitation to Faculty

Dear nursing faculty,

My name is Carolyn Ackerman and I am a doctoral student at Creighton University. I am conducting research on “Gaming as a Teaching Strategy for End-of-Life Nursing education”.

I am inviting you to participate in this Survey Monkey. There are no expected risks involved. Benefits from gathering information from participants are for improved end-of-life education for nursing students. All information will remain confidential. Your name will not be identified. All data will be securely stored in a computer drive only viewed by the researcher. Once data has been recorded, information will be destroyed. You will not receive any monetary compensation or extra credit for your participation in this project. Your willingness to answer and submit these questions acknowledges your consent to participate in this survey.

I appreciate your consideration in completing this survey. If you have further questions you can contact me at CarolynAckerman@creighton.edu or cackerman@regis.edu.

Carolyn Ackerman

Appendix E

Pre-game Survey

Pre-game Survey Questions

1. Have you had a death in your immediate family within the last year?
2. Have you cared for a patient that was dying?
3. Do you feel prepared to care for the dying?
4. Where is your comfort in caring for the dying?
 - a. Very comfortable
 - b. Slightly comfortable
 - c. Not comfortable at all

Appendix F

Post-game survey

Post-Game Survey

1. Do you have increased knowledge to care for the dying as a result of playing the end-of-life game?
 - a. Yes
 - b. No
2. Do you feel more prepared to care for the dying as a result of playing the end-of-life game?
 - a. Yes
 - b. no
3. Where is your comfort in caring for the dying?
 - a. Very comfortable
 - b. Slightly comfortable
 - c. Not comfortable at all
4. What was the most beneficial aspect of playing the game?
5. Would you change any aspect of the game? If so, what?

Appendix G

Focused review

Focused Review Interview Questions

1. How did you choose the person you were going to play in the game?
2. What emotion did you have when you read your major mortality event?
3. What emotion did you have when you found out the diagnosis?
4. What emotion did you have when you found out the prognosis?
5. What guided the choices you made as you progressed throughout the game of living?
6. In what way are you better prepared to care for the dying as a result of playing the end-of-life game?

Appendix H

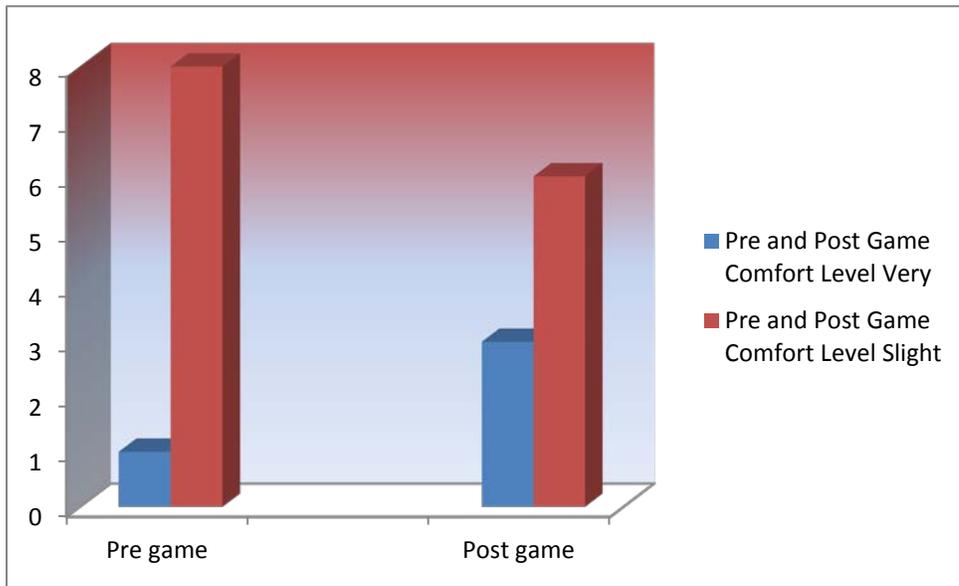
Faculty Survey

Faculty Questions

1. In regards to curriculum, what obstacles need to be addressed to include end-of-life more in curriculum?
2. In regards to faculty reluctance, what concerns do you have including end-of-life in nursing curriculum?
3. In regards to end-of-life exposure for students, what possible options and alternatives do you see to educate students on end-of-life?
4. In what courses do you think an end-of-life interdisciplinary experience would be best?

Appendix I

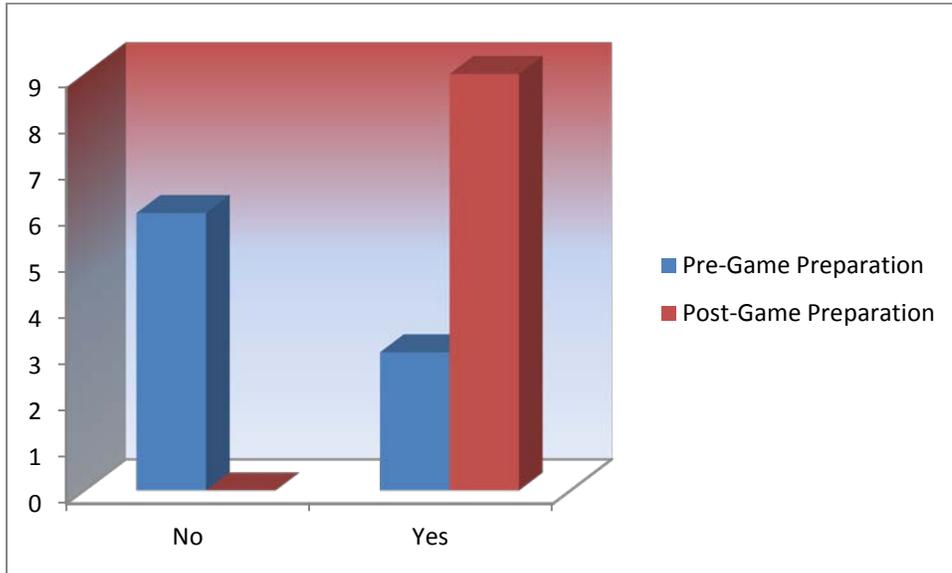
Pre-Game and Post-Game Survey Comparisons



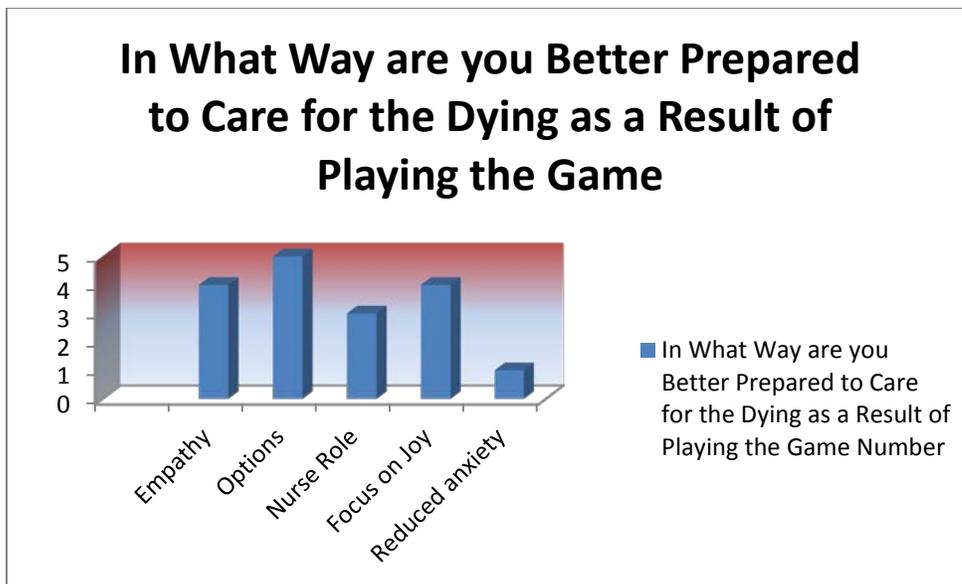
Appendix J

Comparison of Student Focused Review Questions

Is the student feeling more prepared to care for the dying as a result of playing the game?



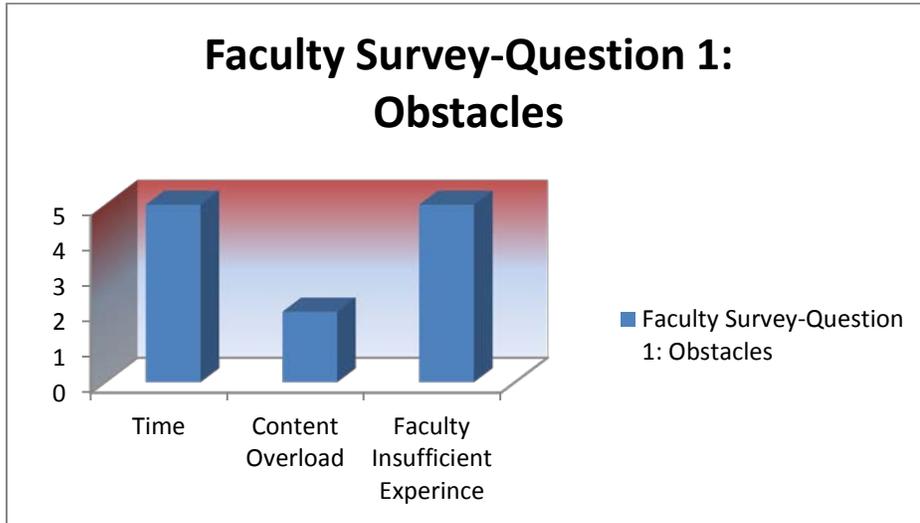
In What Way are you Better Prepared to Care for the Dying as a Result of Playing the Game



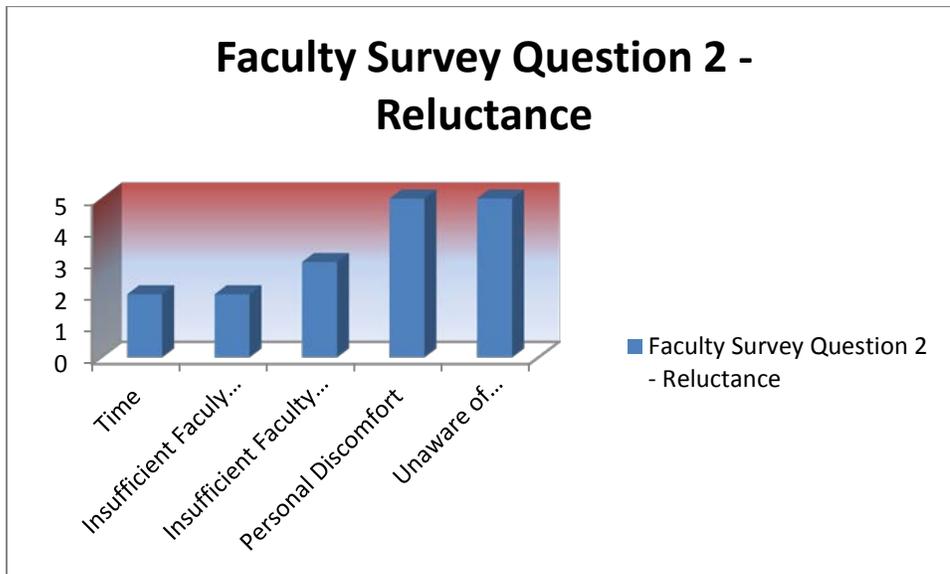
Appendix K

Comparison of Faculty Survey Questions

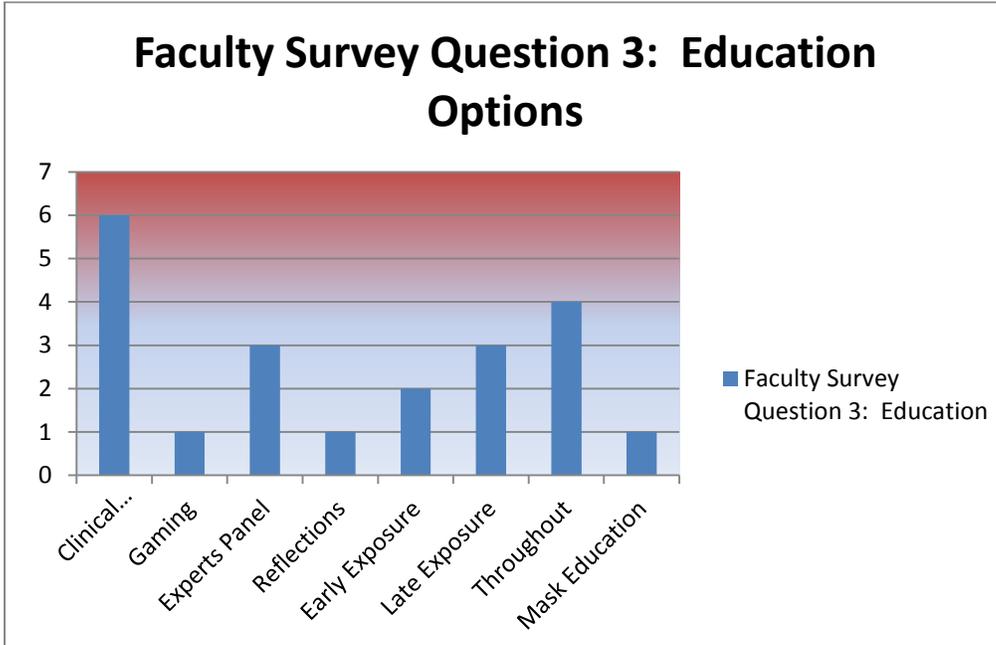
Question 1



Question 2



Question 3



Question 4

