DIGITAL STORY ANALYSIS UTILIZING THE ADVANCING CARE EXCELLENCE FOR
SENIORS FRAMEWORK

By

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To my mother
~Kathleen Nina Williams~
January 5, 1934 – November 20, 2012

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LIST OF ABBREVIATIONS

ACES	Advancing Care Excellence for Seniors
ADN	Associate degree in nursing
ANA	American Nurses Association
CCNE	Commission on Collegiate Nursing Education
NLN	National League for Nursing
NLNAC	National League for Nursing Accrediting Commission

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The purpose of this study was to explore the effectiveness of using digital storytelling as an end of rotation assignment, in a long-term care setting, for pre-licensure nursing students as a means to demonstrate an understanding of the Advancing Care Excellence for Seniors (ACES) framework. The research sought to explore the relationship between the student's digital story and their understanding of the required knowledge to care for geriatric patients.

CHAPTER 1
INTRODUCTION

Chapter 1 provides an overview and the framework for the use of digital storytelling in geriatric nursing education. The introduction outlines the historical and current trends in nursing education. It provides information on the prevailing state of the aging adult in our society and implications for nursing practice and care. Included in Chapter 1 are the historical underpinnings of storytelling in tradition and education as well as contemporary trends in the use of digital storytelling. Finally Chapter 1 discusses an overview of the research project, including the purpose, research questions, methodology and design.

Overview of Nursing Education

Historical Perspective

Nursing education as formalized training can trace its roots to the work done by Florence Nightingale following the Crimean War. In the mid-19th century, Florence Nightingale recognized more soldiers were dying from common illnesses than war injuries. She instituted protocols for maintaining cleanliness in all areas, including the kitchens, the wards, and the patients. These interventions led to improved survival rates for the injured. She also was responsible for founding the first nursing training program, the Nightingale Training School, at St. Thomas' Hospital in London, England (Baly, 1995; National League for Nursing, 2007; Rush, 1992; Zerwekh & Garneau, 2012). This formalization of nursing care was focused on training nurses to work in hospitals, to train other nurses and to work with the sick poor in the community. Practices were based on the same tenets of hygienic care she had established during the war (National League for Nursing, 2007; Zerwekh & Garneau, 2012; Rush, 1992). With the outbreak

of the Civil War in the United States, a similar need for sanitary care of wounded soldiers led to the development of a formalized healthcare system, including nursing training. Hospitals were recognized as arenas to promote healing instead of asylums for the infirm and with this shift came an increased demand for trained nurses (Keating, 2006; National League for Nursing, 2007; Rush, 1992; Toman & Thifault, 2012; Zerwekh & Garneau, 2012). In 1899, the first formal university training program was established for nursing education at Teachers College, Columbia University. The intent was to provide didactic content to enhance the science of nursing hand-in-hand with clinical education (Rush, 1992; Toman & Thifault, 2012).

In 1903, the profession saw the first state legislation passed in North Carolina for the mandatory registration of trained nurses. This precedent made it illegal to practice nursing in the state of North Carolina, without a formal education (Bullough, 1976; Nelson, 2002; Nursing Education History, 2012). New York became the first state in 1938 to pass a specific scope of practice for the registered nurse, to include minimal education requirements (Bullough, 1976; Smith, 1969).

Until the early 1950s, nursing education was primarily based in hospital diploma programs, with a small percentage of practitioners attending university training either for a degree or certificate. Those attending in a university setting were acknowledged as needing additional education to either act as a nursing administrator or nurse educators (Keating, 2006; National League for Nursing, 2007; Rush, 1992; Zerwekh & Garneau, 2012). As with the Crimean War, post-World War II led to a significant shortage of trained nurses for an increasingly complex healthcare system. This prompted the

development of Associate degree nursing programs at junior colleges to help meet the demands (Orsolini-Hain & Waters, 2009).

The American Nurses Association (ANA) and the National League for Nursing (NLN) had published standards of practice for registered nurses by 1965 (Bullough, 1976; Nursing Education History, 2012). These standards included education requirements which addressed training nurses in technical skills as well as the ability to care for the physiological and psychosocial needs of the patient (Nelson, 2002; Orsolini-Hain & Waters; Saylor, 1990).

In the late 1990s, two nursing education accrediting bodies were developed and recognized by the U.S. Department of Education. They are the National League for Nursing Accrediting Commission (NLNAC) and the American Association of College of Nursing's Commission on Collegiate Nursing Education (CCNE). This led to the regulation of minimum curriculum requirements for those educational institutions seeking accreditation which included specific standards addressing the congruency of theory to clinical practice (Ironside, 2001; Lasater, 2011; Nursing Education History, 2012).

Foundation of Nursing

Registered nurses account for one of largest professions involved in direct patient care. There are over 3.1 million registered nurses in the United States (American Association of Colleges of Nursing, 2011; Benner, Benner, Sutphen, & Leonard, 2009; Health Resources and Sevices Administration, 2010). The nursing profession is described as encompassing both art and science within its defining characteristics. The art of nursing has been illustrated as an expression of sympathy, attitudes of concern, ethical and moral commitment and sensitivity to feelings of others. The scientific aspect

of the profession is primarily focused on objectivity, rational examination and measurement, verification of evidence, disciplined critical thinking, skepticism and rigorous intellectual honesty regarding conclusions drawn from facts (Dunphy, 2001; Peplau, 1988). To further the understanding of "the art of nursing," nurse theorists have put forth models of caring as being central to the profession. The most well-known of these are: Madeline Leininger's Theory of Culture Care, Jean Watson's Theory of Human Caring, Simone Roach's theory on caring and Boykin and Schoenhofer's Nursing as Caring (McCance, McKenna, & Boore, 1999, Parker, 2001).

Current trends in nursing education

Nursing education is increasingly challenged with a demand for including new content or concepts in an already overburdened curriculum (Pressler & Kenner, 2009). Current research has demonstrated a need for registered nursing curricula to include teaching and learning strategies which will facilitate the development of clinical reasoning, to include understanding the context of the situation from the viewpoint of the patient's life. This encompasses teaching students to consider a patient through the multiple lenses of culture, daily environment, illness experience and their relationships with significant others in their lives (Benner et al., 2009; Diekelmann, Ironside, & Gunn, 2003;Ironside, 2006).

<div align="center">

Silver Tsunami

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In 2011, the first baby boomers began to turn 65 years old. It is estimated that there are over 78 million Americans born between the years of 1946 to 1964 (Centers for Disease Control and Prevention, 2003; Centers for Disease Control and Prevention and The Merck Company Foundation., 2007; U.S. Census Bureau, 2008). Over the next 25 years, the number of individuals over the age of 65 in the United States will almost

double. This translates into individuals over the age of 65 making up approximately 20 percent of the total population (Centers for Disease Control and Prevention, 2003; Centers for Disease Control and Prevention and The Merck Company Foundation., 2007; U.S. Census Bureau, 2008).

During the past decade, improved medical care and prevention efforts have contributed to dramatic increases in life expectancy in the United States (Centers for Disease Control and Prevention, 2003;Centers for Disease Control and Prevention and The Merck Company Foundation, 2007). The life expectancy rate has increased 45% since 1960 with a current life expectancy of 78.2 years. There has been a decline in mortality related to infectious disease and acute illness with an increase of mortality related to chronic disease and degenerative illness (Bodenheimer, Chen, & Bennett, 2009; Centers for Disease Control and Prevention, 2003). The combination of these two factors will lead to an increase in individuals over the age of 65 seeking health care during the next two decades (Bodenheimer, Chen, & Bennett, 2009; Centers for Disease Control and Prevention, 2003; Centers for Disease Control and Prevention and The Merck Company Foundation., 2007). The American Hospital Association (2007) reports that 37 million baby boomers will be managing more than one chronic condition by 2030, with one out of four, or 14 million, living with diabetes; almost half will be living with arthritis and more than one-third, or over 21 million, will be classified as obese and living with all the health risks associated with obesity. The combination of an increase in the aging population and the complexity of their healthcare calls for an increase in preparing nurses with the ability to deliver competent care to this vulnerable population.

The National Council of State Boards of Nursing (2012) report that 56.1% of new graduates report caring for older adult clients aged 65 to 85 with an additional 27.8% reporting caring for older adult clients aged 85 or older (NCSBN, 2012).In 2008, the Institute of Medicine (IOM) published a report calling for a national agenda to improve the ability of health care workers to care for older Americans. Specifically addressed in this, was a need for increasing the competence of all individuals, including nurses, in the delivery of geriatric care (Institute of Medicine of the National Academies, 2008). Given the growing population over the age of 65, there is a need to implement innovative strategies to prepare pre-licensure nursing students in the care of older adults (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; Mion, 2003; National League for Nursing, 2009; Tagliareni & McLaughlin, 2007).

Advancing Care Excellence for Seniors

The John Hartford Foundation in conjunction with the Independence Foundation of Philadelphia funded a study to research the geriatric content in associate degree nursing (ADN) programs across the United States (Ironside, et al., 2010; Tagliareni, et al., 2012; Tagliareni & McLaughlin, 2007). The results of this study demonstrated a critical need to develop curriculum to prepare nursing graduates in the care of older adults (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; National League for Nursing, 2009). In 2008, The Hartford Foundation, The Independence Foundation of Philadelphia and Laerdal Medical funded a collaborative project between the NLN and the Community College of Philadelphia to develop a set of minimum standards of knowledge, skills and attitudes to care for older adults for per-licensure nursing students (Tagliareni, Cline, Mengel, McLaughlin, & King, 2012; Tagliareni & McLaughlin, 2007; National League for Nursing, 2009). In September 2009, the Advancing Care

Excellence for Seniors framework developed by this grant was launched at the NLN Education Summit. It provides for a conceptual framework that was utilized in this research study, in which students can gain understanding of the importance of individualized aging, complexity of care and life transitions, using evolving geriatric knowledge to provide care for the older adult (NLN, 2011; Tagliareni, et al., 2012).This researcher has developed a rubric to assess student learning outcomes in the three specific identified knowledge domains of individualized aging, complexity of care and life transitions based on the ACES framework. The rubric has been reviewed for content validity by ACES experts and piloted.

Challenges for Nursing Education

Current practices in nursing education can trace their foundation back to the 1950s (Benner, Benner, Sutphen, & Leonard, 2009). Modern nursing educators utilize teaching strategies which frequently mirror how they were taught. Skill based learning, classroom learning and clinical learning are taught in silos. It is rare for students to encounter educational environments where they are asked to integrate what they have learned in the classroom into the clinical arena. This leads to a fragmented and superficial understanding of how to holistically care for patients (Benner, Benner, Sutphen, & Leonard, 2009; Diekelmann, 2001; Diekelmann, Ironside, & Gunn, 2003)

A series of challenges face today's nurse educators to seek new and innovative methods to facilitate student learning. Nurse educators feel pressured by the vast amount of information covered in current nursing curricula and over compensate by attempting to lecture all to cover the content (Pressler & Kenner, 2009). The nursing education profession has been challenged to implement innovative teaching strategies to promote situational decision making within a contextual model of teaching and

learning (Benner, et al., 2009; Ironside, 2006).One innovative means to encouraging pre-professional nurses to engage with older patients is storytelling.

Stories provide the ability for nurses to reflect on their values and attitudes in a manner they may not be able to achieve otherwise. Stories provide a means to recall details and bring experiences to life to enhance the students understanding of the encounter (Benner, et al., 2009; Brown, Kirkpatrick, Mangum, & Avery, 2008; Ironside, 2006). Storytelling as a teaching and learning tool in nursing education is an established mechanism to promote reflecion and demonstrate a deeper understanding of events (Diekelmann, 2001; Ironside, 2003; Nehls, 1995). It is through both the telling and sharing of stories that nursing students come to recognize and understand qualitative distincition in patient situations (Benner, Hooper-Kyriakidis, & Stannard, 1999; Ironside, 2003). Narrative presentation of experiences encourages reflective thinking of both students and teachers and may increase the understanding of what was learned and how it was learned (Diekelmann, 2004). Digital storytelling provides a potential new medium to develop, deliver and share these narratives which will enhance students' ability to consider a patient through the multiple lenses of culture, daily environment, illness experience and their relationships with significant others in their lives (Benner et al., 2009; Diekelmann, Ironside, & Gunn, 2003;Ironside, 2006).

Storytelling

The following sections will present an overview of storytelling. Included are highlights of the historical context of stories, their use in education and development and use of digital storytelling in education.

Tradition of Stories

Storytelling has played a significant role in how we perceive history. It was/is the mechanism by which knowledge and culture are passed onto others. It is both a form of education and entertainment for all ages. Stories impact the way we see our world and can sway our beliefs and values (Abrahamson, 1998; Robinson, 2004). Stories can represent life as it was, is or could be (Parkinson, 2001).

The Story

Scholes, Phelan and Kellogg (2006) define a narrative as having two central characteristics. They are the existence of a story and story-teller. Bonifer (2010) delineates the difference between a narrative and a story. He describes a narrative as a flow of events connected to a theme and a story as being the cognizant ordering of these events to stimulate a meaning. Worth (2008) further depicts a narrative as the way individuals order their experience in time within a unified sequential structure. It is with the addition of the two aspects of a plot, chronological and non-chronological, that a story if formed. These two facets allow for both the timeline of events and the context which they are grounded in, to guide one into making sense of the events that create the story. Labov (2011) identifies three basic elements of a story which will be used for the purpose of this research. The three structural elements are temporal organization, orientation and coda. Temporal organization refers to the order of events within a given timeframe. Orientation is the introduction and identifying of the action in the context of time, place and initial behavior. The coda refers to the end of a narrative in which the temporal setting is returned to the present.

Storytelling in Higher Education

Storytelling in education has been instrumental in helping students make meaning of complex human conditions and life events (Burk, 2000). Abrahamson (1998) identifies critical reflection as an outcome to utilizing stories in the classroom. Stories become the manner in which students can process the complex nature of what they are being presented within the classroom thus forging a learning community of shared views.

Digital Storytelling

Defining a Digital Story

The ability for individuals to bring their personal stories to life is increasing in popularity, with the widespread availability of personal computers and the ease of creating multimedia productions with low cost software. This has given birth to a new genre of storytelling: digital storytelling. The Digital Storytelling Association defines digital storytelling as "…the modern expression of the ancient art of storytelling. Digital stories derive their power through weaving images, music, narrative and voice together, thereby giving deep dimension and vivid color to characters, situations and insights" (Rule, 2011). Rossiter and Garcia (2010) define digital stories as "short vignettes that combine the art of telling stories with multimedia objects including images, audio and video." The Center for Digital Storytelling (CDS) defines a digital story as "a short, first person video-narrative created by combining recorded voice, still and moving images and music or other sound" (Center for Digital Storytelling, 2011). For the purpose of this research, a digital story will follow the definition as outlined by Rossiter and Garcia (2010).

History of Digital Storytelling

Digital storytelling emerged in the 1990s as a distinct storytelling tool. Joe Lambert and Dana Atchley at the Center for Digital Storytelling (CDS) housed at the University of California, Berkley have been credited with the origins of digital storytelling (Bull & Kajder, 2004; Chung, 2007). The CDS continues to train individuals in the art of digital storytelling using their prescribed seven elements of effective digital storytelling (Robin, 2008). Over the past 2 decades, digital storytelling has grown from a venue for individuals and communities to preserve their history to a widely used tool in the educator's toolkit (Robin, 2008).

Implications for the use of Digital Storytelling in Higher Education

Digital storytelling has been demonstrated as a powerful teaching and learning tool in higher education. Studies have demonstrated the use of digital storytelling can support individual reflective learning of students when employed in the classroom (Christiansen, 2011; D'Alessandro, Lewis, & D'Alessandro, 2004; Skouge & Rao, 2009). Digital storytelling has also been demonstrated as having an impact on reflective learning when utilized as a teaching strategy for both individual and peer settings (Cheng & Chau, 2009; Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Stacey & Hardy, 2010). Digital storytelling has been revealed to promote reflective learning in healthcare professional education. Digital storytelling promotes the use of reflection as a means to integrate new understanding, within the context of transitioning to professional nurse, into one's experience in order to make better choices in the future. It has been shown that the sharing of stories, particularly in health and medicine can promote new insights and knowledge through reflection for both patients and healthcare providers as either creators and/or consumers of these digital stories

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(Christiansen, 2011; D'Alessandro, Lewis & D'Alessandro, 2004, McLellan, 2006). The establishment of competency in the use of technology has been confirmed as a positive outcome of using digital storytelling in the literature (Czarnecki, 2009; Heo, 2009).

Purpose

The purpose of this study was to explore the effectiveness of using digital storytelling as an end of rotation assignment, in a long-term care setting, for pre-licensure nursing students as a means to demonstrate an understanding of the Advancing Care Excellence for Seniors (ACES) framework. National accrediting organizations for nursing programs require the documentation of student learning outcomes to include valid and reliable mechanisms to assess them (Halstead, 2007; Lowenstein & Bradshaw, 2001; National League for Nursing Certification Governance Committee, 2005). The research sought to explore the relationship between the student's digital story and their understanding of the required knowledge to care for geriatric patients. The research aimed to investigate the use of digital storytelling as an innovative situational teaching stragey in the context of geriatric care to promote a greater understanding of the ACES framework. The essential information required to care for geriatric patients is based on the understanding of the three knowledge domains of the ACES framework: individualized aging, complexity of care and vulnerabilty during life transitions. Additionally, the purpose of this research was to determine if there are further themes present in the students' digital stories in addition to those outlined in the ACES framework. As such, the research questions which guide this study are:

RQ1. Does the digital story rubric assess the student learning outcomes as they relate to the ACES framework?

RQ2. What themes are found in the digital stories in addition to those assessed by the ACES rubric?

Methodology

This study employed a mixed method, non-experimental research design using a concurrent triangulation approach (Creswell, 2009; Onwuegbuzie & Leech, 2006). In the concurrent triangulation approach the data for the quantitative and qualitative research was be collected at the same time. The research questions sought to discern whether quantitative and qualitative data provided opportunity to inform the research questions.

CHAPTER 2
LITERATURE REVIEW

Chapter 2 provides a review of the literature related to key areas salient to this research project. They include current trends and expectations in nursing education, the Advancing Care Excellence for Seniors (ACES) framework, and the utilization of digital storytelling as a tool for teaching and learning in higher education.

Current Trends in Nursing Education

Nursing education has changed little since the 1950s while the healthcare environment in which nurses practice has changed dramatically (Benner, et al., 2009; Institute of Medicine, 2011; Ironside, 2004). Nursing curricula have been charged with being content laden and guilty of incorporating more material rather than reworking the content to reflect current practice (Benner et al., 2009; Ironside, 2004; Tanner, 2004). Recent research has called for fundamental changes in the way nurses are educated (Benner, et al., 2009; Institute of Medicine, 2011; Ironside, 2004; 2004, Orsolini-Hain L; Tanner, 2008). Two of the central areas of identified need for nursing education reform are related to the requirement for nurses to be competent in understanding the relationship of the patient and/or family in the continuum of care and to be competent in caring for emerging health needs such as geriatrics (Benner, et al., 2009; Institute of Medicine, 2011; Ironside, 2004; 2004, Orsolini-Hain L; Tanner, 2008).

Complex patient-centered care

Nurse educators need to engage students with teaching and learning strategies which will facilitate the development of clinical reasoning, to include understanding the context of the situation from the viewpoint of the patient's life. This encompasses teaching students to consider a patient through the multiple lenses of culture, daily

environment, illness experience and their relationships with significant others in their lives (Benner et al., 2009; Diekelmann, Ironside, & Gunn, 2003; Institute of Medicine, 2011; Ironside, 2004; Ironside, 2006, Tanner, 2004).

Aging America and the Implications for Nursing Practice and Education

The need for competent and holistic care for older adults is imperative in the changing landscape of our population in the United States (Centers for Disease Control and Prevention, 2003; AARP Public Policy Institute, 2009; NLN, 2011; Tagliareni, et al., 2012). Research has demonstrated that fewer nurses are interested in specializing in gerontology than other areas of care (Tagliareni, et al., 2012; Tagliareni & McLaughlin, 2007; National League for Nursing, 2009). Yet, it has been established that nurses who care for older adults and personalize and internalize the importance of their care have a positive impact on their outcomes (Tagliareni, et al., 2012; Tagliareni & McLaughlin, 2007; National League for Nursing, 2009).

The Institute of Medicine (IOM) report (2008) called for a national agenda to improve the ability of health care workers to care for older Americans. Specifically addressed in this, was a need for increasing the competence of all individuals, including nurses, in the delivery of geriatric care. Currently, geriatrics rarely constitutes more than 25% of associate degree nursing programs (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; National League for Nursing, 2009; Tagliareni & McLaughlin, 2007). Research has demonstrated that older patients receive less information related to their health, illness and available resources than younger patients (Ayranci & Ozdag, 2006). Negative attitudes toward the elderly can lead to miscommunication or less than optimal patient education and result in poor patient compliance and/or outcomes (Ayranci & Ozdag, 2006; Cozort, 2008; Sinnott, 1983).

Advancing Care Excellence for Seniors

ACES Essential Knowledge Domains

The ACES framework provides the conceptual framework for this research study. Figure 2-1 summarizes the ACES framework. The ACES framework identifies three essential knowledge domains as being fundamental in providing quality care to older adults. They are: individualized aging, complexity of care and vulnerability during life transitions (NLN, 2011; Tagliareni, et al., 2012). These knowledge domains are key components of ensuring that nursing students understand how older adults and their families interact along the continuum of care and how they make decisions during life transitions (NLN, 2011; Tagliareni, et al., 2012). The following three sections will describe the fundamental tenets of these knowledge domains.

Individualized Aging

Each individual manifests and interprets the aging process in a unique manner. Older adults live in various settings and represent an expansive variety of strengths, resources, needs, wishes, and expectations (NLN, 2011; Tagliareni, et al., 2012). Central to this domain is the understanding that there is no "normal aging" for older adults, either behaviorally or physiologically. The term "normal aging" leads individuals to believe all older adults follow the same sequel as they grow older (NLN, 2011; Tagliareni, et al., 2012).

Complexity of care

Older adults epitomize nurses' most complex clients (NLN, 2011; Tagliareni, et al., 2012). Hospitalized older adults are at increased risk for a variety of geriatric syndromes. Included among these are delirium, falls, incontinence, pressure ulcers, and sleep disturbances (Inouye, Studenski, Tinetti, & Kuchel, 2007; NLN, 2011; Tagliareni,

et al., 2012). The care of older adults requires specialized knowledge in both the art and science of gerontological nursing. Identifying and understanding the complex relationship of aging with acute and chronic conditions may better enable nurses to prevent such complications, thus improving the outcomes of older adults (Inouye, et al., 2007; NLN, 2011; Tagliareni, et al., 2012)

Vulnerability during life transitions

A transition is defined as moving from one state, activity, or place to another. With aging, an older adult is likely to make many transitions across this spectrum. Transitions for the older adult can cause disruption for both the individual and family (NLN, 2011; Tagliareni, et al., 2012). Nurses need to function as advocates for older adults during these transitions. It is in this role that the nurse has the ability to improve the quality of care provided and to incorporate older adults' and caregivers' expectations for management of disease and promotion of health (NLN, 2011; Tagliareni, et al., 2012).

ACES Essential Nursing Actions

The essential nursing actions enable nursing students to transform their knowledge of individualized aging, complexity of care, and vulnerabilities during life transitions into activities that promote competent care for older adults. It involves the development of nursing judgment and supports students in being attune to what is happening, by assessing the older adult's functional status; strengths, resources, needs, and cultural traditions as well as their wishes and expectations (NLN, 2011; Tagliareni, et al., 2012). The following three sections will provide a brief overview of these essential nursing actions and their role in caring for the older adult.

Assess function and expectations

A comprehensive assessment to include ability and personal expectations are an integral part of evaluating function. Together physical assessment findings, the inclusion of function and personal expectations and wishes produce a comprehensive view of the older adult's condition. This relationship of assessment findings is essential to ensure the understanding of individualized aging. In addition, the use of therapeutic communication skills is necessary to recognize and respect the older adult's understanding, wishes and expectations (NLN, 2011; Tagliareni, et al., 2012).

Coordinate and manage care

When older adults enter the health care system for an acute exacerbation of a chronic condition, they require care to not only repair health but to stabilize other chronic health diseases (AARP Public Policy Institute, 2009). Coordinating and managing care for the older adult includes a multidisciplinary approach to care. It is necessary to provide mechanisms for the older adult and their families/caregivers to access knowledge and resources to facilitate promoting maximum function and independence for the older adult. Considerations regarding life transitions must also be taken into account to afford the potential for maximum function and maintain the older adult's quality of life (Inouye, et al., 2007; NLN, 2011; Tagliareni, et al., 2012).

Use evolving knowledge

Over the past several years, developing knowledge regarding care of older adults has emerged. This evolving knowledge is crucial information for students to understand in order to provide competent care to older adults (NLN, 2011; Tagliareni, et al., 2012). Identifying geriatric syndromes and recognizing atypical presentations, along with their

potential impact on acute/chronic conditions will help improve patient outcomes (Inouye, et al., 2007).

Make situational decisions

Students need to be able to evaluate individual situations and analyze the risks and benefits of decisions based on the expectations of the older adult and family. As with individualized aging, each circumstance is unique and should be evaluated as such (NLN, 2011; Tagliareni, et al., 2012). An additional role of the nurse is to help the older adult gather information and understand the risks and benefits associated with treatment options and life choices. Ensuring older adults are able to make informed choices, consistent with their preferences, culture, and values, is essential for quality nursing care (NLN, 2011; Tagliareni, et al., 2012).

Digital Storytelling in Higher Education

As previously discussed in the introduction, digital storytelling has been demonstrated as a powerful teaching and learning tool in higher education. Studies have demonstrated the use of digital storytelling can support individual and peer reflective learning of students when employed in the classroom (Christiansen, 2011; D'Alessandro, Lewis, & D'Alessandro, 2004; Skouge & Rao, 2009; Cheng & Chau, 2009; Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Stacey & Hardy, 2010). The establishment of best practices and competency in the use of technology has been confirmed as a positive outcome of using digital storytelling in the literature (Czarnecki, 2009; Heo, 2009).

Digital Storytelling as a Teaching and Learning Tool

Digital storytelling in higher education has been employed as a teaching tool by integrating the constructive learning of creating a digital story with the reflective aspect

of learning involved in the creation of a personal story. In this employment of digital storytelling, the construction of the digital story is as integral to the learning process as the final product (Cheng & Chau, 2009; Czarnecki, 2009; Heo, 2009; McLellan, 2007; Sandars & Murray, 2009; Skouge & Rao, 2009; Stacey & Hardy, 2010).

The use of digital storytelling in higher education has also been employed as a learning resource. Research has demonstrated both individual and peer reflective learning by observing digital stories created by others. Students are able to integrate new understanding of the circumstances into their personal conceptualization of the content (Cheng & Chau, 2009; Christiansen, 2011; Czarnecki, 2009; D'Alessandro, Lewis, & D'Alessandro, 2004; Heo, 2009; McLellan, 2007; Sandars & Murray, 2009; Stacey & Hardy, 2010)

Individual Reflective Learning

Skouge and Rao (2009) believe the process of storytelling is as important as the resulting digital story. They present their experiences utilizing digital storytelling in the Pacific islands of Hawaii. The authors employed digital storytelling as a means to bring lessons about community, culture, local values and traditions into the classroom. The project allowed students to gain an authentic experience about life in different communities through the development and sharing of digital storytelling. The authors identified that through the use of digital storytelling, students were able to comprehend inclusion, advocacy and accommodations for individuals. The authors emphasize the ability for any interested educator to employ digital storytelling as a teaching tool due to the available simplistic tools now widely available. Skouge and Rao (2009) do not include a specific definition of the elements of a story in their published research. One key component the educators employed was the de-emphasis on the product outcomes

in favor of the experiential outcomes. The authors found the digital stories were transformative to the students who worked on the projects. They used three key principles to sum up their technique: explore, reflect and envision.

Christiansen (2011) utilized a phenomenographic approach in researching different ways in which patient digital storytelling influences students' professional learning. This allowed for understanding how the same event may be interpreted differently across a population rather than variation within an individual experience.

The sample consisted of 20 pre-registered nursing students recruited from a university in the United Kingdom, following a call for volunteers. Students ranged from 22-41 years old. Data collection was done using phenomenographic interviews following the viewing of a prepared digital patient story. The author does not indicate what specific parameters were demonstrated to define what constituted a story in this research.

Data analysis revealed the following categories representing the different ways in which the patient digital story was experienced or understood: as a learning resource, as an emotional experience, as a reflective experience and as a transformative experience. Students who experienced the digital story as a learning resource found the story had little personal relevance to them or their professional practice. The students focused more on the technology than engaged in the message. Those students identified as experiencing the digital story as an emotional experience identified a significant emotional upset after viewing the digital story. The students' intention was to make sense of the emotional implication and gain understanding of the patient experience. The students who were categorized as having experienced the digital story

as a reflective exercise identified as experiencing the patient in a holistic way and made connections between the personal and contextual element of the story. These students' experiences contained an emotional element which they used to bring new meaning through reflection to formulate an ethical judgment about the patient experience. The students identified as having a transformative experience gained new perspectives through critical engagement with the digital story which lead to new insights about themselves and their developing professional identity.

Although specific data collection was not presented in this article regarding the number of students who fell into each of these experience categories, the study results clearly support the conclusion of reflective learning for the observer. This study defines a higher order of reflective learning by incorporating the transformative experience as a potential level of understanding, indicating the ability of observing a digital patient story could elicit a change in professional behavior towards other patients.

This study demonstrates the importance of learning spaces in the promotion of reflective dialogue. Each of the varying students' perceived level of engagement or usefulness of the digital stories is embedded in their belief of how this fit into their personal and professional being.

D'Alessandro, Lewis and D'Alessandro (2004) present their findings on the use of digital storytelling in a computer-based patient simulation program. Eight digital stories were developed based on common pediatric problems. The digital stories were designed based on a four section template. The first section was the patient's story told in their own voice with a clinical narrator. A first person approach to the story is the only published information regarding a requirement of the story. The second section

constructed a problem-based approach to the patient's problem. This included differential diagnosis, history & physical and diagnostic testing. The third section consisted of discussion of the patient's disease process based on research. The last section was a brief conclusion and follow-up told using the patient's voice.

The eight stories were hosted online at the University of Iowa's Virtual Hospital digital library. This service provided free, anonymous use of the collection. The digital stories were evaluated for use and hyperlink citations. Additionally, an anonymous, voluntary survey was added which reported that 91.4% of the respondents over a four year period indicated they would remember some part of the case for future reference in practice. The survey results identified although the original digital stories were designed for medical students, they were viewed by a variety of health science students and practitioners who also found them useful.

Study limitations were identified as a small percentage of users filled out the voluntary survey which may account for a potential positive bias. The survey also did not target specific information regarding what the respondents learned. Although precise information was not available on what they participants learned the description that 91.4% of the respondents specified they would use information from this exercise in the future indicates reflection occurred by their intent to enable better choices in the future (Rogers, 2001).

Individual & Peer Reflective Learning

Stacey and Hardy (2011) worked with the Patient Voices Programme to create reflective digital stories of newly qualified nurses. This study demonstrates the use of reflection as a means to integrate new understanding, within the context of transitioning to professional nurse, into one's experience in order to make better choices in the

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future. Reflection in this circumstance is identified as being retrospective reflection for both the individual creating the story and the group presentations (Rogers, 2001).

These nurses developed stories using personal photos and their own words to communicate an event they found particularly challenging in their transition from student to nurse. This research utilizes first person orientation as the basis of their story creation. The research reports participants were guided in what constitutes a good story but the specifics of this are not included in the publication. The intent was to utilize these stories as an educational opportunity for future nursing students to learn from and to provide faculty with the opportunity to consider how best to utilize these digital stories in the curriculum to teach students about the challenges of working in today's healthcare system. The study is based on the concept of learning through reflection as outlined by Dewey (1938) and Kolb (1984).

The research is broken into three distinct phases. The first phase implemented focus group discussions with the creators of the digital stories. The second phase used focus group discussion with faculty to guide the implementation of the stories into the nursing curriculum. The third utilized focus group discussions with finishing nursing students in whose classroom the stories were shared. The storytellers identified the emotion of the project as being both a challenge and a benefit due to the depth of reflection they engaged in. The storytellers ultimately felt they had learned by reflection to be more aware of their challenges as a nurse and to be more supportive of future new nurses they worked with. The faculty felt the stories reflected their own personal experiences and what they had heard from other new nurses as well as reaffirmed the vulnerability of new nurses. The students who watched the videos discussed the

benefits of reflecting on these stories to gaining personal insight in how they might react in a similar situation and made them more aware of how reflective learning could improve their professional practice (Stacey & Hardy, 2010).

In conclusion the authors identify how Kolb's Learning Cycle could help guide a deeper understanding of this project. They expanded on this model by identifying a new model of learning which they named The Spiral of Growth through Stories (SGTS). This new model incorporates both the benefits of reflection and observation in developing new understanding for both the creators of the stories and those who shared in them through watching them.

Similarly, McLellan (2006) in *Digital Storytelling in Higher Education* provides an overview of the various possibilities for employing digital storytelling in higher education settings. The author's research points to five potential areas of application. These areas include personal stories, archives, memorials, avocational and digital stories in health and medicine. The author emphasizes the importance of the first-person voice within a story and includes a discussion on the problematic situations which a story should show a resolution to. As with Stacey and Hardy (2011), the author identifies how the sharing of stories, particularly in health and medicine can promote new insights and knowledge through reflection for both patients and healthcare providers as either creators and/or consumers of these digital stories. Each of these identified areas of application has the potential for students to experience in-action or retrospective reflection (Rogers, 2001).

Sandars and Murray (2009) conducted a pilot study to test their hypothesis that digital storytelling had the potential to offer an innovative approach to engage first year undergraduate medical students in reflection. The theoretical framework for their study

was based on transformative reflective learning theory. The pilot sample was comprised of 12 first year undergraduate medical students who volunteered to use digital storytelling for a reflective learning exercise. Each student visited a patient in their home and were assigned to identify their thoughts and feelings of what it was like to communicate with a patient they had not met before while also considering the thoughts and feelings of the patient.

The students used photos they took and PowerPoint to create their presentations. PowerPoint was chosen as the digital story platform because of the familiarity and availability of the software to the students. Students were not given specific information on what elements should be included in the creation of their story. They described their reflections with the aid of photos. The assignment also included presenting their digital stories to the other participants.

Sandars and Murray (2009) identified the following limitations to their pilot study: sample size, self-selected participants, no technical issues with the creating of the digital stories and no external analysis of their data. They identified a need for future research to compare reflective learning with the use of digital storytelling versus text based reflections.

The authors conducted focus group interviews after the presentations were completed. Three themes emerged from these interviews. They were: engagement in the process, facilitation of reflection by the creation of the digital story and facilitation of reflection by the presentation of the digital story for both the creator and the observer. These themes coincide with the findings and presentation of both Stacey and Hardy

(2011) and Mclellan (2006) where attributes of reflective learning are ascribed to both the creation of the digital story and the sharing of them.

They were guided through their development of a digital story in their reflective observation of the events, both their own and their peers. New concepts and inferences were revealed by the focus groups which will lead to new active assimilation with future patient interactions. Rogers (2001) considers this type of structured experience as having the potential for anticipatory, reflection-in-action and retrospective reflection properties.

In 2009, Cheng and Chau published the result of their study examining the use of digital storytelling as a tool to develop reflective insight in an e-Portfolio format. The authors stress the need for considering pedagogical and technological concerns that are significant for all parties involved in the digital storytelling process. Two primary research questions are addressed:

Do students have the confidence to create their own digital videos for reflection and do they find this activity relevant to their learning needs?

To what extent does digital video affect the level of self-reflection and the nature of peer feedback?

The authors identify some concepts which are central to their study. The first is their belief that to promote effective reflection, the process must involve both individuals and peers. They acknowledge that the ability to self-reflect is widely recognized as a desirable learner trait that can stimulate deep learning. This perception is based in the blended constructivist view of both Piaget and Vygotsky. The second is the adoption of

the ARCS model which focuses on four motivational characteristics for learning: attention relevance, confidence and satisfaction as the framework for the study.

The participants were voluntary, cohort based students in a *Workplace English* course. Students were required to produce a video of a mock job interview and upload it for sharing to their e-portfolio. A questionnaire was developed to evaluate the quality of the reflection and a two-dimensional evaluation was conducted regarding peer feedback.

The study results found that the creating of digital video for reflection was motivating and relevant to the students' learning. Additionally, a large proportion of video-based reflection demonstrated a high level of self-reflection. It also demonstrated an increased amount of peer feedback when the project was a digital story versus text files. The results of this study support the pedagogy of use of digital storytelling to promote personal reflection in the production (both reflection-in-action- and retrospective reflection) as well as retrospective reflection in the sharing of personal digital stories (Rogers, 2011).

Jenkins and Lonsdale (2007) present their findings on the effectiveness of digital storytelling as a means to enhance student learning through reflection. The study identifies four curricular areas at the University of Gloucestershire in which digital storytelling have been piloted. They are: student induction (transition into higher education), landscape design, accountancy and second year sports development. The student induction and landscape design student examples were the main focus of the findings presented.

In the student induction program digital storytelling was introduced as a technique to encourage and embed student reflection in the activities. Emphasis was placed on the importance of recognizing reflection as being enhanced in a collaborative process. Twenty-nine total digital stories were produced. The landscape design students utilized a case study approach to their digital story production. Students were not given specific instruction on what elements were necessary for the development of a story. Individual students captured their reflections on the development of their designs, their skills and facilitating staff understanding of the students' experience.

The authors collected feedback from both the students and instructors using questionnaire and interview techniques. The stories were evaluated against the Moon's Map of Learning and McDrury and Alterios Model of Reflective Learning through Storytelling. This article focuses on the analysis of the pilot digital stories against the latter evaluation structure. Of the 29 student induction stories, 25 rated level 1or 2, with none rating level 5. Three of the five landscape design rated level 4 and one rated level 5. The different stages of enrollment at the university level may have contributed to the difference (the induction students were on their 4th day).

Jenkins and Lonsdale (2007) concluded that digital stories should be considered as a discipline specific resource to promote reflection and encourage deep learning. They identify the potential for sharing these stories for peer leaning which additionally might give students an opportunity to connect with the thought process of others and allow for scaffolding to occur. This reflective learning approach is an example of the importance of the contextual factor in supporting reflective learning (Rogers, 2001).

Technology Competencies

How digital storytelling builds 21st century skills (2009) published in *Library Technology Reports* examines how digital storytelling can be used to build skills as outlined by The International Society for Technology in Education (ISTE). The specific skills identified are: creativity and innovation, communication and collaboration, research and information fluency, critical thinking, problem solving and decision making, digital citizenship and technology operation and concepts.

Czarnecki (2009) describes individual projects which meet each of these standards. She outlines how when students are able to look at their research and translate it to a story it leads to more personal and meaningful learning. Specific elements of a story are not outlined in this research. These five identified skills when employed in digital storytelling have the prospective to facilitate reflective learning before, during and after the production (Rogers, 2001).

Additionally, the author describes how the creating of a video is an exercise in what ISTE would label digital citizenship. The author discusses how digital storytelling promotes 21st Century job skills. This is accomplished in the building process of a digital story by integrating the modern skills required as identified by the Department of Education. These skills are comprised of basic skills (reading, writing and computation), technical skills and organizational skills. The author also connects the need for teachers to become involved in the epistemological process called for by the learners to adopt and sustain the cultural conceptions and behaviors.

Heo (2009) conducted research on the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. The author defined self-efficacy as a personal belief about his/her performance capabilities in a

given domain of activity. The study examined the effects of the experience of digital storytelling on pre-service teachers' self-efficacy in educational technology and other personal dispositions. The study is grounded in a constructivism framework which proposed that learning is an active process of constructing knowledge and meaning from personal experience.

A quasi experimental study design was employed using a pre/post survey model. Students were given a tutorial in the development of a digital story. They were assigned to create a digital story on the topic "why do I want to be a teacher?' 3 – 6 minutes long. Specific instructions on necessary elements of a story were not included in the tutorial for creating a digital story. As hypothesized, pre-service teachers' self-efficacy toward educational technology was greatly improved with the digital storytelling experience. The findings provided initial evidence that knowledge and skills of personal technology can be transferred to educational technology settings with the help of digital storytelling. Although the scope of this article did not address the participants' personal reflection, this study design has the potential to be a reflective learning tool. The steps as outlined would lend itself to reflection before, in-action and retrospective of the context they were asked to develop a digital story on (Rogers, 2001). Each of these competencies is integral to the success of these pre-service teachers incorporation of technology in their future teaching. This type of approach enables the participant to move to a higher perceived level of self-efficacy by having concrete experience with this technology integration.

Best Practices

Sandars, Murray and Pellow (2008) present an overview of the essential elements inherent in creating a digital story and the potential reflective learning that may

accompany this type of enterprise. The authors begin by discussing the power of reflective learning. They put forth that the process of reflective learning allows learners to make sense of an experience and develop a deeper understanding of it based on the work of Moon. The authors include a discussion of the sharing of digital storytelling and how this may also increase the reflective learning.

The authors emphasize 12 tips to promoting reflective learning in the creation and sharing of digital storytelling. They are: choose a topic that is personal to the learner, write the story keeping in mind an audience, collect media to support your personal feelings or understanding of the situation, select those media which best represent the story, build the digital story with multimedia with a 3 to 5 minute timeframe in mind, present or share the digital story to allow feedback, encourage reflection at all stages of development, avoid being too ambitious in the development of the digital story, provide adequate technical support, consider the creative and reflective process in grading the project, use with an overall approach of reflective learning and persuade others of the value of digital storytelling

The concept of reflective learning as discussed in this article is corroborated by the findings of Cheng and Chau (2008), Library Technology Reports (2009), and Skouge and Rao (2009). Each identifies the construction of the digital story as pivotal in developing a deeper understanding of the content being taught and a more personalized integration of the subject. Rogers (2001) supports this pedagogic employment as it identifies the importance of reflection before, during and after the structured experience.

Summary

The use of digital storytelling provides the opportunity to enhance students' learning through reflection across higher education curriculums both as a teaching and learning tool. Each of these studies has inherent in their analysis the following key tenets: learning is best conceived as a process, not in terms of outcomes, learning is relearning, learning necessitates the resolution of conflicts, learning is a holistic process of reworking the world we know, learning results from transactions between the person and the environment and learning is the process of creating knowledge. Key components of the definition of reflective learning have been demonstrated in these studies. Included in the definition is the requirement of active engagement on the part of the individual or group (Rogers 2001). Stacey and Hardy (2011), Sandars and Murray (2009) and Jenkins and Lonsdale (2008) each describe how the use of digital storytelling as a pedagogic tool facilitates the active engagement on part of both the individual students and the group observers. Rogers (2001) also puts forth the concept of a trigger which constitutes an unusual or perplexing situation or experience that then stimulates an examination of one's beliefs in this new context, as being a component of the reflective theory definition. Stacey and Hardy (2011), Sandars and Murray (2009) and Cheng and Chau (2008) each reported this type of finding in their research.

Digital storytelling has the potential to provide valuable insights and understanding through reflective or transformative learning both with the construction of personal digital stories and observation of digital stories. An added benefit of employing this pedagogical methodology as a constructive assignment is the integration of technology skills in our students (Library Technology Reports, 2009). One reoccurring theme in the reviewed literature, which bears consideration for any faculty considering the integration

digital storytelling into their course, is the need for technology support for both students and faculty. The assumption that students are "tech" savvy and will have no problem with this type of assignment is disputed as being misleading because it assumes all students of a given age group are digital natives and can therefore already possess the skills to produce a digital story (Cheng & Chau, 2009; Skouge & Rao, 2009; Sandars, Murray & Pellow, 2008).

This literature review has revealed a lack of detailed research, either quantitative or qualitative in format, as it pertains to the benefits of utilizing digital storytelling in higher education. Additional, a lack of what defining characteristics constituted a story was noted in the literature related to digital storytelling. The benefit of exploring this pedagogical format bears further research.
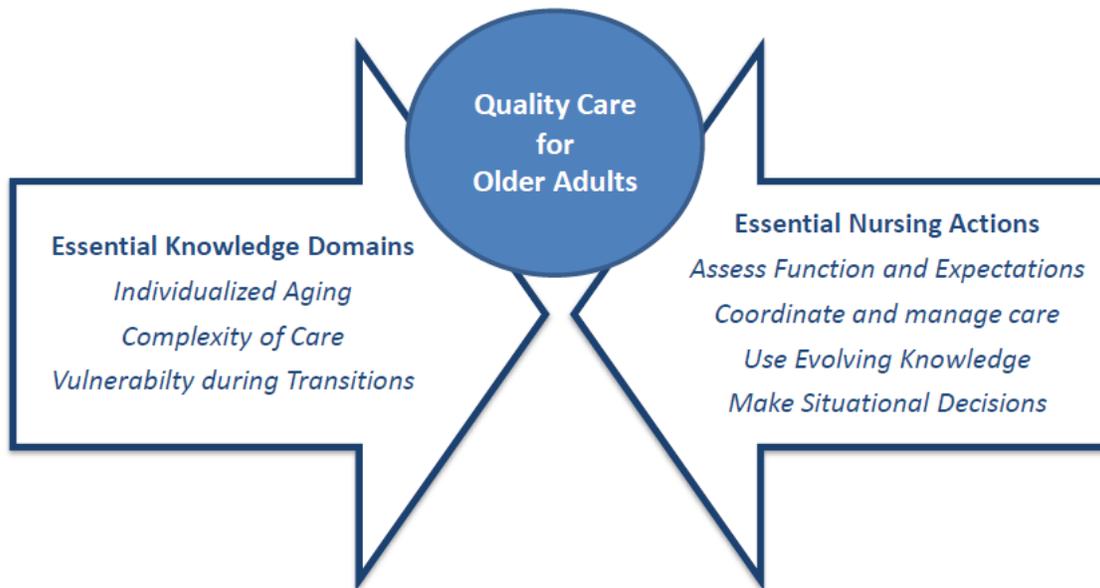
Figure 2-1. Conceptualization of the ACES framework.

CHAPTER 3
METHODOLOGY

Overview

Chapter 1 introduced the challenges faced in nursing education today to develop and implement innovative teaching strategies to promote situational decision making within a contextual model of teaching and learning (Benner, et al., 2009; Ironside, 2006). Stories were identified as a method employed to enhance the ability of the nursing student to reflect on their values and attitudes as a means to bring experiences to life and enrich their understanding of the encounter (Benner, et al., 2009; Brown, Kirkpatrick, Mangum, & Avery, 2008; Ironside, 2006). The literature further demonstrates the development of digital stories as a mechanism to promote and communicate these stories (Cheng & Chau, 2009; Christiansen, 2011; D'Alessandro, Lewis, & D'Alessandro, 2004; Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Skouge & Rao, 2009; Stacey & Hardy, 2010).

In conjunction with the need to expand the teaching and learning strategies in nursing education is the need to improve the ability of health care workers to care for older Americans (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; Mion, 2003; National League for Nursing, 2009; Tagliareni & McLaughlin, 2007). Specifically there is a need for increasing the competence of all individuals, including nurses, in the delivery of geriatric care (Institute of Medicine of the National Academies, 2008).

Chapter 3 outlines the overall research design for the project. It will review the overarching purpose of the project to include the research questions. The population and sample will be described as they pertain to this project. The research design will be addressed to include the methodology, data collection and analysis. Potential limitations

of this project are discussed. Chapter 3 will conclude with a summary outlining the

potential significance to the greater community this project may have implications for.

Purpose

The purpose of this study was to explore the effectiveness of using digital

storytelling as an end of rotation assignment, in a long-term care setting, for pre-

licensure nursing students as a means to demonstrate an understanding of the

Advancing Care Excellence for Seniors (ACES) framework. National accrediting

organizations for nursing programs require the documentation of student learning

outcomes to include valid and reliable mechanisms to assess them (Halstead, 2007;

Lowenstein & Bradshaw, 2001; National League for Nursing Certification Governance

Committee, 2005). The research sought to explore the relationship between the

student's digital story and their understanding of the required knowledge to care for

geriatric patients. The research aimed to investigate the use of digital storytelling as an

innovative situational teaching strategy in the context of geriatric care to promote a

greater understanding of the ACES framework. The essential information required to

care for geriatric patients is based on the understanding of the three knowledge

domains of the ACES framework: individualized aging, complexity of care and life

transitions. Additionally, the purpose of this research was to determine if there are

further themes present in the students' digital stories in addition to those outlined in the

ACES framework. As such, the research questions which guide this study are:

RQ1. Does the digital story rubric assess the student learning outcomes as they
relate to the ACES framework?
RQ2. What themes are found in the digital stories in addition to those assessed by
the ACES rubric?

Research Design

This study employed a mixed method, non-experimental research design using a concurrent triangulation approach. Figure 3-1 is a schematic representation of concurrent triangulation (Creswell, 2009; Onwuegbuzie & Leech, 2006). In the concurrent triangulation approach the data for the quantitative and qualitative research was collected at the same time. The research questions sought to discern whether quantitative and qualitative data provide opportunity to inform the research questions. Graded rubrics for the students' digital stories were examined for mastery of the learning outcomes. From the same sample of digital stories, students' stories were examined using a thematic or content analysis approach to identify common characteristics within the digital stories. This represents a systematic approach to analyzing the themes derived from the stories into major categories for the purpose of interpretation (Bowen, 2009; Glesne, 2011). These themes were then be compared to the identified components of the knowledge domains of the ACES framework. This will allowed for the potential to discover any additional themes within the digital stories beyond the identified ACES knowledge domains.

Approval to conduct this study was obtained from the Institutional Review Board (IRB) of the University of Florida (Appendix A). Permission to collect data was also obtained from Palm Beach State College (Appendix B).

Population

The participants' digital storytelling stories were collected from 1st semester nursing students in an associate degree nursing (ADN) program at a public state college in the Southeastern United States. This nursing program has a concurrent enrollment of over 400 students with a wide range of diversity of both age and race. The

1st semester is comprised of seventy-eight percent female students. This is slightly lower than the program and national enrollment of female students at eighty-two percent and eighty-five percent respectfully. Fifty-four percent of the 1st semester students are thirty years old or younger. This is slightly higher than the overall program where forty-two percent are thirty years old or younger. Nationally, fifty-one percent of students enrolled in an ADN program are thirty years old or younger. The 1st semester students are primarily white, non-Hispanic at sixty-nine percent of those enrolled. This is higher than the percentage in the overall program at fifty percent and comparable to the national average of fifty percent. Figures 3-2, 3-3 and 3-4 represent the age, gender and race of the 1st semester nursing students, the nursing program and other U.S. ADN programs.

Sample

All first semester nursing students, in this ADN program are assigned a clinical rotation in a skilled nursing facility (SNF). There are between 10 and 12 individual clinical groups with eight to nine students per group, each academic semester. Of these clinical groups, three faculty utilize digital storytelling as their required end-of-course assignment (Appendix C). The students in these three groups were given additional resources to facilitate their ability to create the digital stories. In addition to the resources in the assignment, the three faculty members teaching these sections have worked in previous semesters with students on this assignment. They are familiar with using either PowerPoint voiceovers or Photostory to assist students. Students are also referred to the college Computer Lab for additional technical skill assistance with building their digital stories. Each faculty member utilizes their post-conference time in the clinical setting to answer students' questions regarding this assignment. This

accounts for a maximum of two hours per week, for the 7 week rotation. See Figure 3-5 for a schematic of this assignment in context and student support resources. The participants' digital stories will be selected from these three identified clinical groups. Utilizing this type of sampling approach is consistent with a purposive sampling design specifically convenience and homogenous in nature (Creswell, 2009; Onwuegbuzie & Leech, 2006; Polit & Tantano-Beck, 2004). This is relative to this study because the data is retrospective in nature (thus convenience sample) and from a uniform group of participants (1st semester, pre-licensure nursing students) (Patton, 2002; Polit & Tantano-Beck, 2004; Sage Publication, 2007). Research Question 1 utilized a sample size of 22 digital stories based on the final number of students in each section. Research Question 2 evaluated six purposively selected digital storytelling stories which demonstrate the three elements of a story as identified by Labov (2011). The three structural elements are temporal organization, orientation and coda. Temporal organization refers to the order of events within a given timeframe. Orientation is the introduction and identifying of the action in the context of time, place and initial behavior. The coda refers to the end of a narrative in which the temporal setting is returned to the present.

Instrumentation

The ACES digital storytelling grading rubric (Appendix D) was developed by the researcher. It is based on the understanding and work the researcher has done on the ACES project. Key components of the three knowledge domains of Individualized Aging, Complexity of Care and Vulnerability during Life Transitions are identified. The rubric is based on a three point score ranging from little or no evidence of the knowledge domains to significant components of the knowledge domains represented.

The rubric was sent to content experts for review and to establish content validity. The rubric was piloted by the researcher and two additional faculty. The researcher has been a project staff member of the ACES grant since its inception. The researcher has presented faculty development workshops on the ACES framework at the local, state and national level. Each of the two faculty reviewers attended 2 national workshops on the ACES framework. Additionally, both faculty reviewers presented the ACES framework at various professional development workshops within the state. The two faculty reviewers teach the ACES framework to students in the specified ADN program. Three digital stories from a previous semester were evaluated using the rubric by all three reviewers. This approach demonstrates investigator triangulation (Polit & Tantano-Beck, 2000; Sage Publication, 2007). Inter-rater reliability was determined using Cohen's Kappa (Cohen's Kappa: Index of inter-rater reliability, 2012). The rubric was finalized after the content validity and pilot was completed.

Data Collection

The digital stories were collected during the spring 2013 term from assignments submitted during the fall 2012 term. Three instructors utilized the rubric to grade the digital stories. Each of the three instructors has attended a minimum of 2 faculty development workshops on the ACES framework. The three instructors have taught the ACES framework in the clinical setting for a minimum of two years. Each instructor was asked to submit their students' digital stories for review and the associated graded ACES rubric. This represents a retrospective data collection method (Polit & Tantano-Beck, 2004). From the digital stories submitted, 6 were purposively selected based on containing the three elements of a story for in-depth content analysis. Adequacy of data

will be collected so that the previously collected data are confirmed and understood (Glesne, 2011; Sage Publication, 2007).

Data Analysis

The ACES rubric data was reviewed to determine whether the students' digital stories demonstrate the expected learning outcomes of the assignment. The nursing program has a minimum passing score of seventy-five percent. This level was used to assess the students' learning outcomes when reviewing the ACES rubrics used to evaluate the digital stories. The rubric is based on a 0-3 point system, with the maximum score being 9 for a digital story. Therefore, seventy-five percent would equate to a minimum score equal to 6.75 on the rubric. Deeper review utilizing descriptive statistics determined which ACES knowledge domains were the most prevalent demonstrated in the assignment and which were the least.

The six digital stories selected for in-depth review were analyzed using a thematic and template or content analysis format (Glesne, 2011; Mayring, 2000; Polit & Tantano-Beck, 2004). This research design allowed for potential emergent themes not identified by the ACES framework to be discovered. The data from the template review was used in an interpretive manner to add further content validity to the ACES rubric (Bowen, 2009; Polit & Tantano-Beck, 2004). The filtering of pre-determined content of the ACES framework allows for a deeper review of themes, topics or perpectives that may have been ignored (Bowen, 2009; Glesne, 2011; Polit & Tantano-Beck, 2004). Each analysis was reported on separately. However, additional data comparison was used to explore possible convergence among the results (Creswell, 2009; Onwuegbuzie & Leech, 2006). See Figure 3-5 for a schematic representation of the qualitative data analysis.

Limitations

Limitations for this study included both quantitative and qualitative concerns (Creswell, 2009; Onwuegbuzie & Leech, 2006). There was a threat to external validity due to the participants belonging to a convience sample. This may limit the generalizability of the findings (Creswell, 2009). Inter-rater reliability and content validity of the ACES rubric were established. However, this was the first time the ACES rubric was used on a large scale to assess the level of student learning outcomes. Additionally, researcher bias in evaluating the digital stories for thematic analysis cannot be ignored (Glesne, 2011). The researcher is a project staff member and has worked with the project throughout the development and national launch of the ACES framework.

Summary

The potential consequence of this research was the ability to impact patient outcomes by enhancing students' understanding of multifaceted needs surrounding the older adult. It is imperative nursing curricula strive to increase the likelihood that students will graduate and select geriatrics as their primary area of focus to practice in. Research has demonstrated if registered nurses' attitudes are not favorable toward older adults, they are less likely to choose this area to practice in. Yet, it has been reported that already 80% of home care visits and 49% of acute care admission days are attributed to the older adult patient (Mion, 2003). This translates into a potential workforce that does not value the importance of quality care for the elderly but whose primary care responsibilities will be this population.

An added challenge to nursing education is the stimulus by national nursing education experts to enhance students' opportunities for alternate ways of learning

while still in school (Diekelmann, 2001). Pre-licensure students are currently measured as being successful in their educational endeavors based on their ability to perform a skill or answer a test question correctly. Minimal opportunities are provided for learning in context, at this level due to the type of assessment both at the program and national level to measure competency (Ironside, 2003). The benefits of this research may establish a new tool to evaluate students understanding of the ACES framework.

Figure 3-1. Schematic representation of concurrent triangulation design (Creswell, 2009)
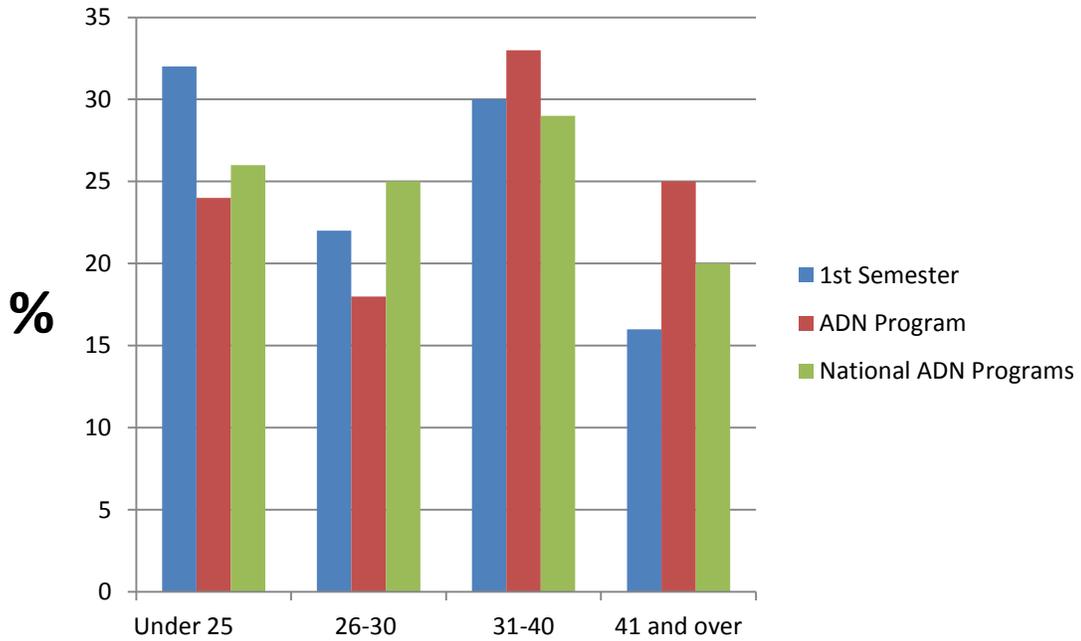
Figure 3-2. Age demographics comparison
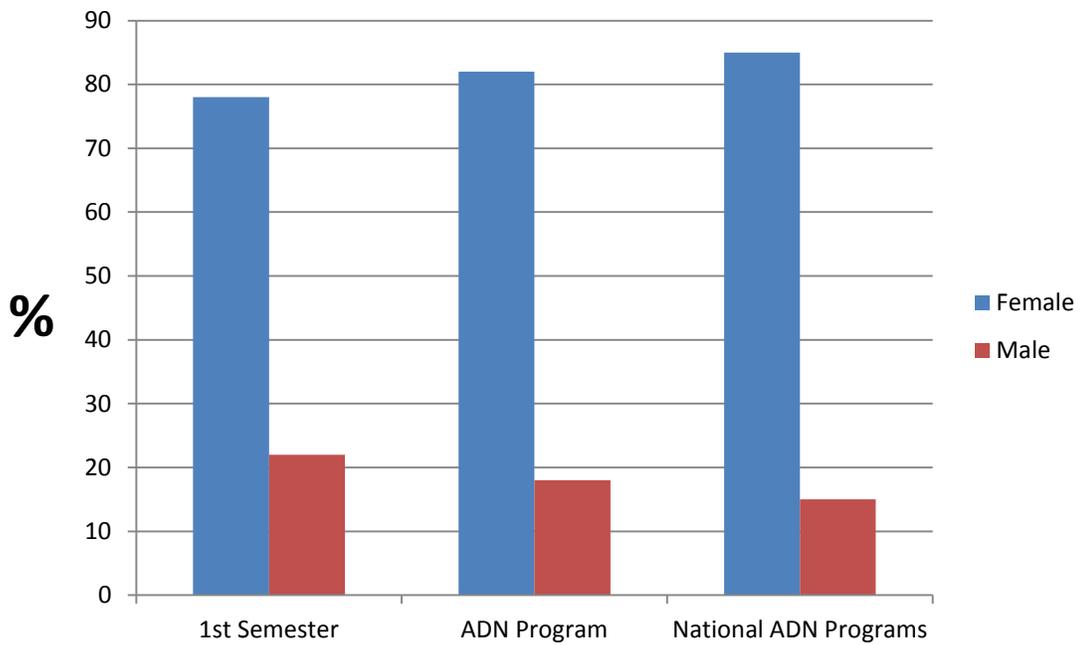
Figure 3-3. Gender demographics comparison
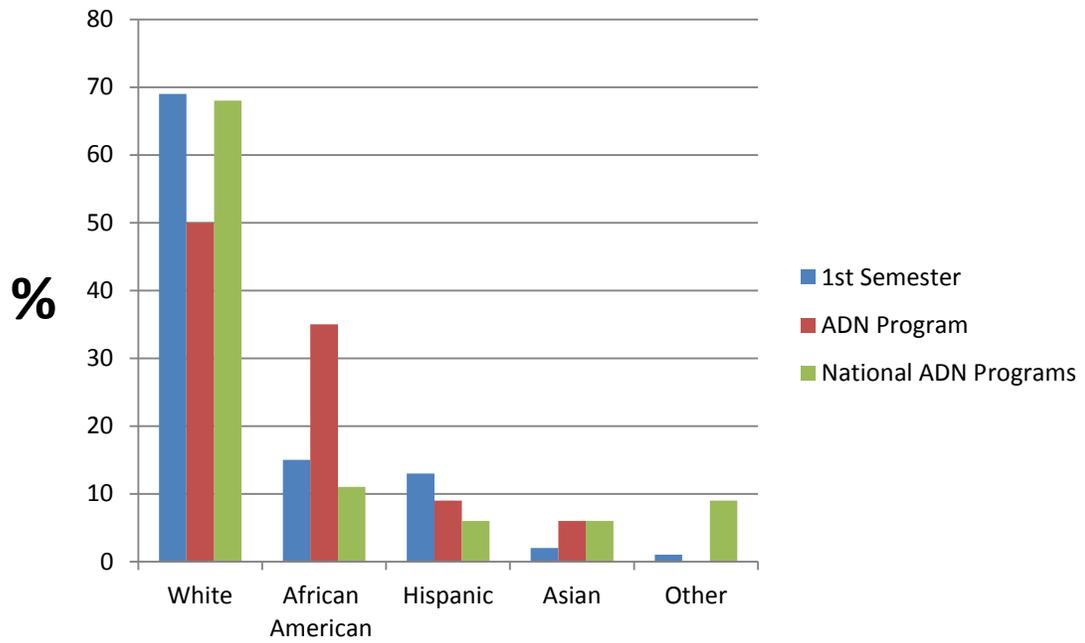
Figure 3-4. Race demographics comparison
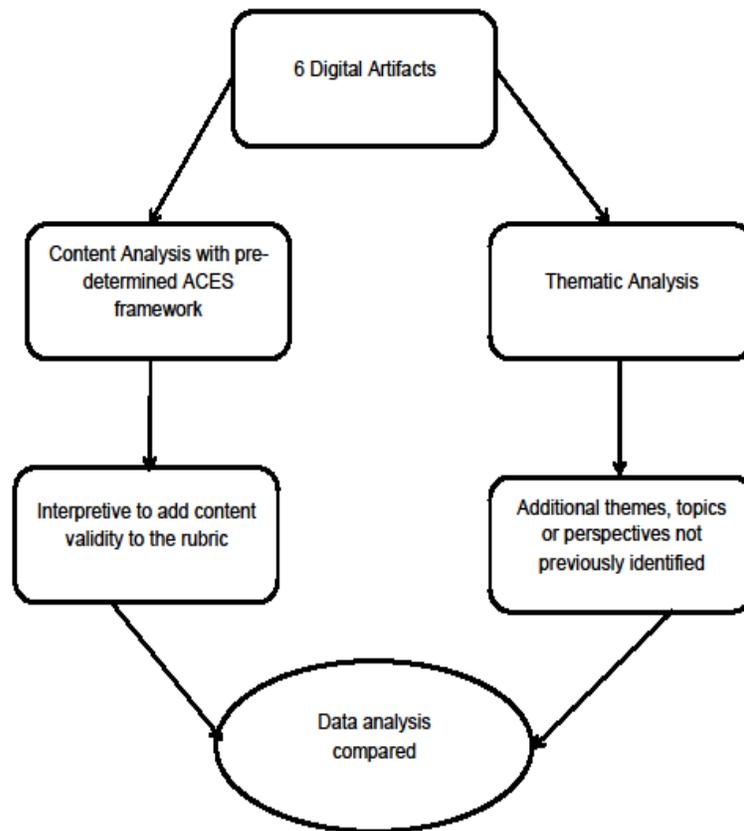
Figure 3-5. Schematic representation of the qualitative data analysis method
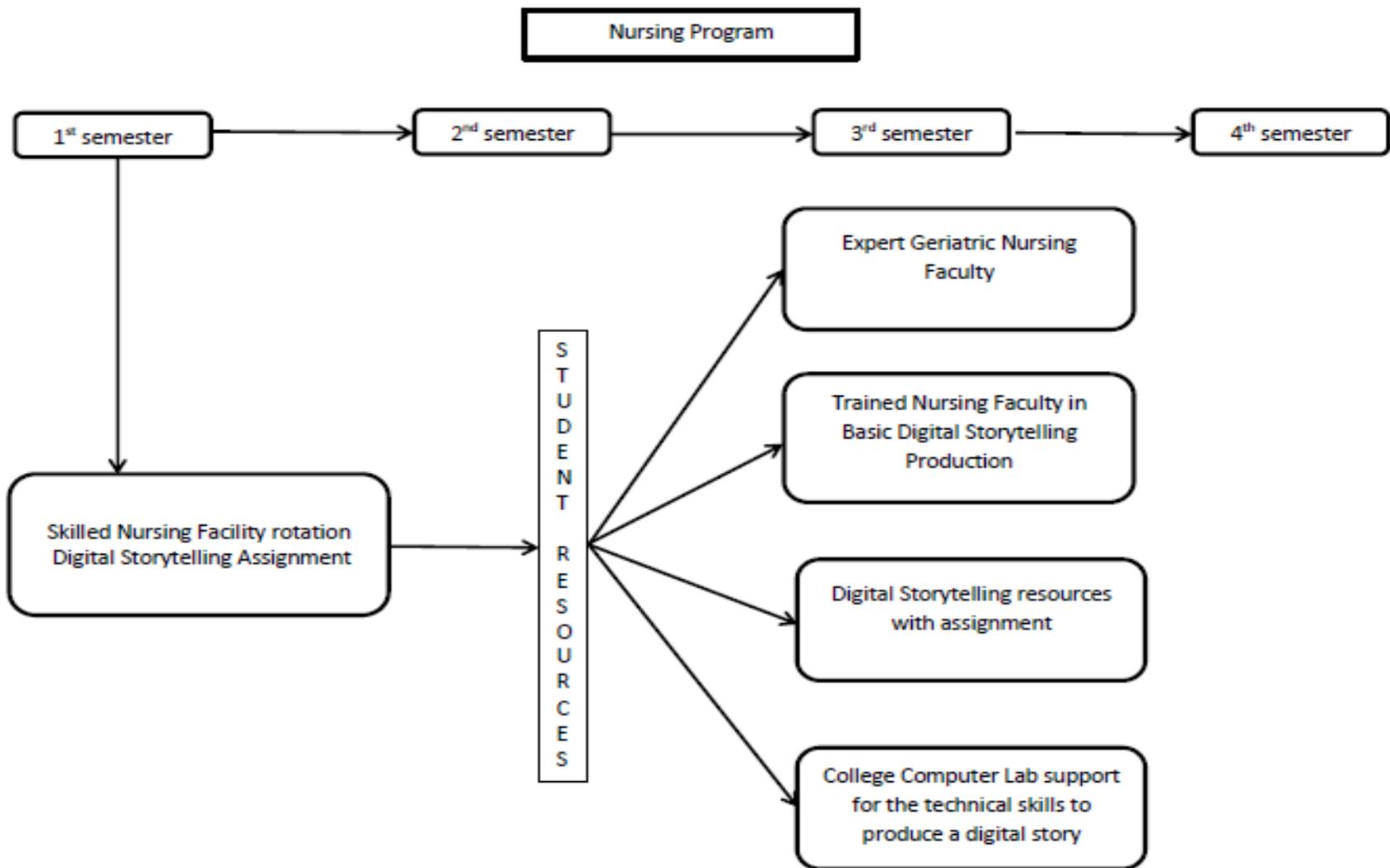
Figure 3-6. Schematic representation of the student digital storytelling assignment in context and resources

CHAPTER 4
RESULTS

Overview

This dissertation explored the relationship between nursing students' digital stories and their understanding of the required knowledge to care for geriatric patients. The research aimed to investigate the use of digital storytelling as an innovative situational teaching strategy in the context of geriatric care to promote a greater understanding of the Advancing Care Excellence for Seniors (ACES) framework (NLN, 2011; Tagliareni, et al., 2012). The essential information required to care for geriatric patients is based on the understanding of the three knowledge domains of the ACES framework: individualized aging, complexity of care and life transitions. Additionally, the research sought to determine whether there were further themes present in the students' digital stories in addition to those outlined in the ACES framework. Chapter 4 will present the results of this mixed method research project. First, the quantitative results from the research which explored the effectiveness of using digital storytelling as an end of rotation assignment, in a long-term care setting, for pre-licensure nursing students as a means to demonstrate an understanding of the ACES framework will be presented. In the latter section of Chapter 4 the results of the qualitative research, which investigated the presence of further themes present in the students' digital stories in addition to those outlined in the ACES framework.

Sample

The sample for this research study was purposively selected from first semester nursing students in an Associate's degree nursing program (ADN) program within a public state college in the Southeastern United States. The purposive sampling

approach was specifically convenience and homogenous in nature (Creswell, 2009; Onwuegbuzie & Leech, 2006; Polit & Tantano-Beck, 2004). The sample was comprised from students who were assigned to one of the three clinical faculty who utilize digital storytelling as a required end-of-course assignment in a long-term care clinical rotation. The digital stories in these three clinical groups form the data set for the quantitative explorative component, which addressed Research Question 1.

Six digital stories selected for qualitative inquiry were purposively selected from the same group of students based on the previously identified characteristics of a story as defined by Labov (2011): temporal organization, orientation and coda. These characteristics are relative to this study because the data is retrospective in nature and from a uniform group of participants (1st semester, pre-licensure nursing students) (Patton, 2002; Polit & Tantano-Beck, 2004; Sage Publication, 2007).

The initial sample consisted of twenty-five students. The final sample size was twenty-two students; three students were excluded due to program attrition. The gender distribution of the sample was predominantly female (n=14, 64%), a proportion that is slightly lower than the typical ADN class seen at this college. Figure 4-1 represents an overview of the gender distribution of the sample, the 1st semester enrolled students in this ADN program, the overall student population in the ADN program and overall national enrollment.

The sample was relatively young, comprised of 15 students under the age of thirty representing sixty-eight percent of the sample. In comparison to the program enrollees, fifty-four percent of the 1st semester students are thirty years old or younger. Figure 4-2 represents the age distribution of the sample, the 1st semester enrolled students in this

ADN program, the overall student population in the ADN program and overall national enrollment.

The individual's whose artifacts were associated with the study were primarily white, non-Hispanic (n=15, 68%). This is higher than the overall program which is fifty percent, white, non-Hispanic. Figure 4-3 represents the race distribution of the sample, the 1st semester enrolled students in this ADN program, the overall student population in the ADN program and overall national enrollment.

Results

Research Question 1

The first research question sought to explore the relationship between the student's digital story and their understanding of the required knowledge to care for geriatric patients. Research Question 1 is: Does the digital story rubric assess the student learning outcomes as they relate to the ACES framework? Descriptive statistics and analysis of variance procedures were used to analyze the data. All of the digital stories were evaluated by both the group's instructor and the researcher. The intra-class correlation for the sample while not significant provided evidence of acceptable reliability.

Individualized aging.

Seventeen students in the sample demonstrated a mastery of the individualized aging knowledge domain at a minimum of 75% (raw score of 2.25), which is considered passing for this ADN nursing program. The individualized aging scores were analyzed using descriptive statistics. Each grader's results were analyzed separately. The descriptive statistical results for individualized aging are presented in Table 4-1.

The group data were analyzed by using a one-way between subjects ANOVA, where instructional group served as the factor and score served as the outcome variable. With an alpha level of .05, the effect of the instructor was significant, $F(2,19) = 23.08$, $p = .000$. Results indicate there was a significant difference between at least one of the instructional groups, based on the means being equal in value in group one and two; there is a significant difference between group three and groups one and two.

Complexity of care

Sixteen students in the sample demonstrated a mastery of the complexity of care knowledge domain at a minimum of 75% (raw score of 2.25), which is considered passing for this ADN nursing program. The complexity of care scores were analyzed using descriptive statistics. Each grader's results were analyzed separately. The descriptive statistical results for individualized aging are presented in Table 4-2.

The group data were analyzed by using a one-way between subjects ANOVA, where instructional group served as the factor and score served as the outcome variable. With an alpha level of .05, the effect of the instructor was significant, $F(2,19) = 8.78$, $p = .002$. Results indicate there was a significant difference between at least one of the instructional groups. Using the Bonferroni correction to adjust for multiple comparisons at a 95% confidence level there is a significant difference between group three and groups one and two.

Vulnerability during life transitions

Fourteen students in the sample demonstrated a mastery of the complexity of care knowledge domain at a minimum of 75% (raw score of 2.25), which is considered passing for this ADN nursing program. The vulnerability during life transition scores were analyzed using descriptive statistics. Each grader's results were analyzed

separately. The descriptive statistical results for vulnerability during life transitions are presented in Table 4-3.

The group data were analyzed by using a one-way between subjects ANOVA, where instructional group served as the factor and score served as the outcome variable. With an alpha level of .05, the effect of the instructor was significant, $F_{(2,19)} = 11.11$, $p = .001$. Results indicate there was a significant difference between at least one of the instructional groups. Using the Bonferroni correction to adjust for multiple comparisons at a 95% confidence level there is a significant difference between group three and groups one and two.

Total rubric scores

Seventeen students in the sample demonstrated an overall mastery of the ACES knowledge domains at a minimum of 75% (raw score of 6.75), which is considered passing for this ADN nursing program. The total rubric scores were analyzed using descriptive statistics. Each grader's results were analyzed separately. The descriptive statistical results for total rubric scores are presented in Table 4-4.

The group data were analyzed by using a one-way between subjects ANOVA, where instructional group served as the factor and score served as the outcome variable. With an alpha level of .05, the effect of the instructor was significant, $F_{(2,19)} = 22.65$, $p = .000$. Results indicate there was a significant difference between at least one of the instructional groups. Using the Bonferroni correction to adjust for multiple comparisons at a 95% confidence level there is a significant difference between group three and groups one and two.

Research Question 2

The second research question sought to explore what themes are found in the digital stories in addition to those assessed by the ACES rubric. Six purposively selected digital storytelling stories which demonstrated the three elements of a story as identified by Labov (2011) were analyzed. The three structural elements are temporal organization, orientation and coda. Temporal organization refers to the order of events within a given timeframe. Orientation is the introduction and identifying of the action in the context of time, place and initial behavior. The coda refers to the end of a narrative in which the temporal setting is returned to the present. The six digital stories selected for in-depth review were analyzed using a thematic and template or content analysis format (Glesne, 2011; Mayring, 2000; Polit & Tantano-Beck, 2004). This research design allowed for potential emergent themes not identified by the ACES framework to be discovered. The range of scores for these six digital stories based on the ACES rubric was from six to nine. The maximum possible score was nine. The mean score was 7.83 (Figure 4-4).

The digital stories were first transcribed by the researcher. They were then coded using the distinguishing characteristics of the three knowledge domains in the ACES framework. Figure 4-5 represents the predetermined themes utilized. These characteristics were defined in the ACES rubric. The results of this analysis will be presented first in the following section. The digital stories were then reviewed for additional themes. The results of the additional coding and themes will be presented in the latter part of this section.

Digital Stories

The six digital stories analyzed were created by first semester students who had completed their first clinical rotation with patients. They were assigned to a long term care facility and followed an individual patient for seven weeks. These stories represent their end of course assignment. The six digital stories selected for qualitative analysis are summarized in Table 4-5. The digital stories represent a variety of patients in age and gender. Each digital story was created using presentation software with the majority of students using PowerPoint. Two of the digital stories were submitted as PowerPoint slide shows. The remaining 4 digital stories were submitted as in an MP4 file format.

Digital story 1

This digital story portrays an 89 year-old, female. The student presented the story in the first person format from the point of view of the patient. The orientation of the story is set by the student speaking in first person and reflecting on their outcome of the long-term care rotation. The student reflects on their ageist attitudes at the outset of the rotation and how it changed during the rotation. The student introduces the patient. The temporal sequence of the story follows a description of the struggles and triumphs of being in the long term care facility and transitions into the life she had and lost. The coda brings the viewer back to present time for the patient and a closing sense of the patient's determination to return home to die with dignity and respect.

Digital story 2

The second story analyzed portrays a 78 year-old male. The story is presented in the first person from the point of view of the patient. The orientation of the story begins with the patient introducing himself and describing where he is at this point in his life. The temporal sequence follows a brief description of his life before the long term care

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facility and segues into his daily life in the facility. The story wraps up with the patient

bringing us back to his current situation and acknowledging his understanding that he

will be in the long term care facility for the remainder of his life.

Digital story 3

In the third digital story, the student presents a 77 year-old female patient. The

story is presented in the first person from the viewpoint of the patient. The orientation to

the story begins with the patient introducing herself and telling the viewer where she

lives now. The temporal sequence takes us through a brief history of her life highlighting

significant events throughout her marriage. The coda brings us back to the patient

describing for us where she is now and how her current life circumstances are "not that

bad here." After the end of the story, the student, in first person narrative, describe how

this experience of caring for this patient has led her to believe any day can be a good

day and it is up to you to make it positive.

Digital story 4

Digital story 4 is about a 95 year-old male. The story is told in the first person from

the student's point of view. The orientation is set by the student in his introducing us to

the patient and describing how the patient came to be in the long term care facility. The

temporal organization draws us into the daily routine of the patient as witnessed by the

student. It leads us through the patient's daily struggles with the loss of independence.

The coda brings us to the current transition of the patient's status over the course of

seven weeks from requiring minimal assistance with his activities of daily living to

hospice care. The student included an ending personal reflection of his role transition to

one which would honor the patient's wishes for hospice care.

Digital story 5

This digital story is presented in the first person point of view of the patient. Her age was not identified in the presentation. The orientation of the story is demonstrated by the patient introducing herself and setting the scene of where she lives, in this long term care facility. The temporal orientation follows with the patient telling us about significant events which have occurred during her life, concluding with present day. The patient then returns us to her current situation and acknowledges she likes it where she is and that the nurses take really good care of her. The presentation closes with the student talking in first person. She identifies that she will never forget this rotation and has learned with age comes wisdom.

Digital story 6

This digital story depicts a 67 year-old male patient. It is told in the first person from the viewpoint of the patient. The orientation of the story begins with the patient introducing himself and offering us with an understanding of where he lives (in a long term care facility). The temporal sequence of this story follows a timeline of significant life events and brings us to the present day. The patient then returns us to his current living situation. He acknowledges to the viewer his understanding that although he would like to return to independent living, due to his health challenges this is not possible.

ACES framework themes

Individualized aging

There are five potential characteristics which comprise the knowledge domain of Individualized Aging. They are: assessment of function, assessment of cognitive function, atypical presentation of pain and management of pain, assessment of geriatric

syndromes, assessment of sexuality and assessment of violence and elder mistreat.

Figure 4-6 demonstrates the distribution of the characteristics across the six digital

stories. Although each story included some elements of this knowledge domain, no

single story included all characteristics.

Assessment of function

Assessment of function includes the student nurse's assessment of the following

activities: activities of daily living, independent activities of daily living, age related

changes, nutrition and sensory changes. The author of digital story two used the

following phrase to demonstrate assessment of function in the first person: "I can

transfer myself without assistance from the chair to the bed." Along with this phrase, the

student chose the picture in Figure 4-7 to highlight the type of chair and transfer he/she

was referring to. In digital story four, the student demonstrates assessment of function

in the third person by using the statement, "He eats on his own by himself." Figure 4-8

demonstrates the student's choice of visual representation of this.The student author of

digital story one, demonstrated this assessment by the following statement, "I wear bibs

and diapers." The student chose the picture in Figure 4-9 to further demonstrate this

assessment.

Assessment of cognitive function

Assessment of cognitive function includes the student nurse's assessment of the

following activities: memory status (long term and short term), cognitive impairment,

learning needs and substance misuse.   Assessment of cognitive function was the most

common theme, found in all six digital stories. Students were acutely aware of the

cognitive state of the patient they were caring for and the potential impacts on their care

this presents. Phrases which include "I have one daughter. She is adopted" used in

digital story three along with the photo in Figure 4-10 and "I guess I was thrown off his declining health by his mental acuity" used by the author of digital story four along with Figure 4-11, are examples of cognitive assessment in the first person and third person format.

Assessment of atypical presentation of pain and management of pain

Assessment of atypical presentation of pain and management of pain includes the student nurse's assessment of the following activities: knowledge of pain, use of pharmacologic and non-pharmacologic agents. Two of the six digital stories addressed this aspect of individualized aging. The author of digital story three used the first person format in the statement, "I've also been having hip and shoulder pain," and Figure 4-12 to demonstrate this assessment.   The digital story four's author used the third person format by stating "He moaned with pain when we rolled him to bath him," and the picture in Figure 4-13 to demonstrate the pain assessment.

Assessment of geriatric syndromes

Assessment of geriatric syndromes includes the student nurse's assessment for the presence of the following attributes: sleep disorders, problems with eating or feeding, pain, incontinence, confusion, evidence of falls and/or skin breakdown. Digital story three was the only one which did not have evidence of assessment of geriatric syndromes. The student described the assessment of geriatric syndromes in digital story six by the following statement, "Sometimes when I feel weakened and tired." The student used the picture in Figure 4-14 in conjunction with this statement. The author in digital story four, using third person used the following statement to represent assessment of geriatric syndromes, "Another couple of challenges he faces he's on a thickened diet," along with the picture shown in Figure 4-15.

Assessment of sexuality

Assessment of sexuality includes the student nurse's assessment for the presence of the following attributes: influence of medications, normality, desire and mechanics, intimacy, sexually transmitted infections and orientation. Digital story two's author was the only example of assessing sexuality. The author used the statement, "I have not been sexually active since the death of my wife," in conjunction with the picture in Figure 4-16 to demonstrate this attribute. The author of this digital story used the same picture in various components to demonstrate the physical limitation of his patient and how it impacted multiple areas of his life.

Assessment of violence and elder abuse

Assessment of violence and elder mistreatment includes the student nurse's assessment for the following types of abuse and/or neglect: physical, psychological, financial and verbal. Assessment of violence and elder mistreatment was not an identified theme in any of the six digital stories transcripts. The picture in Figure 4-17 is an example of multiple characteristics of this attribute found in digital story one. The student presented this picture at a place in their story where they were describing despair and depression. However, it is clearly demonstrative of elder abuse and misuse as well.

Complexity of Care

There are seven potential characteristics which comprise the knowledge domain of complexity of care. They are: geriatric syndromes, hydration status, infection, poly-pharmacy, depression, dementia and acute vs. chronic disease process. Figure 4-18 demonstrates the distribution of the characteristics across the six digital stories.

Geriatric syndromes

Geriatric syndromes are comprised of any of the following qualities: presence of sleep disorders, problems with eating or feeding, pain, incontinence, confusion, evidence of falls, and/or skin breakdown. The presence of geriatric syndromes was the most common theme, found in four of the six digital stories. Phrases which include "I wear bibs and diapers," in digital story one accompanied by the picture in Figure 4-19 and "He presented as weak and frail" in digital story four accompanied by the picture in Figure 4-20 are examples of geriatric syndromes presented in the first person and third person narrative format.

Hydration status

The defining characteristics of hydration status are: dehydration, constipation, medication toxicity and/or fluid overload or congestive heart failure. Hydration status was an identified theme in one of the six digital stories. The author of digital story two described his patient's fluid status concerns by the following statement, "I also have type 2 diabetes, hypertension, chronic kidney disease and coronary artery atherosclerosis." Figure 4-21 demonstrates the photo the student presented with this statement.

Infection

Infection was evaluated based on the following specifications: present, increased risk of, and atypical presentation. Two of the six digital stories presented phrases related to infection. The student specified the following statement in digital story two along with the picture in Figure 4-22 to represent this complexity of care attribute, "My arms are wrapped in dressings. If not attended to regularly, the cellulitis could become infected due to my diabetes."

Poly-pharmacy

Poly-pharmacy pertains to the use of multiple medications. Additional specific attributes for this theme include medication reconciliation and financial implications. Poly-pharmacy was an identified theme in only digital story two. The student incorporated multiple phrases to exemplify this attribute. Statements such as, "Some of the adverse effects related to my COPD drug treatment are unavoidable and I cannot stop taking the medication because it is imperative to my clear airways and breathing" and "I take over 20 medications daily," were presented in the first person construct. Figure 4-23 represents the associated picture to these statements.

Depression

Depression traits included the following characteristics: lethality assessment, social isolation, treatment and atypical presentation. Depression was identified as an attribute of complexity of care in four of the six digital stories. The student author in digital story three used the statement, "I don't get many visitors in here," along with Figure 4-24 to demonstrate this concept. Digital story five demonstrate this attribute with the statement, "My husband didn't care if I smoked," and the picture in Figure 4-25.

Dementia

The defining elements of dementia were: types of dementia, behavioral concerns, treatment, client/family education and caregiver burden. Two of the six authors identified dementia in their digital stories. The student in digital story one used the phrase, "I try to remember who I am. I try to remember what I might have done to be placed in a place like this," to convey this. The student used the picture in Figure 4-26 along with this statement. Digital story four provides an additional example of the attribute of dementia

in the statement, "He was confused during the process of getting dressed." Along with this statement, the student provided the picture in Figure 4-27.

Acute vs. chronic disease process

Acute vs. chronic disease process is defined by the identified presence of either disease process and recognition of the difference between them. The attribute of acute vs. chronic disease process was found in four of the six digital stories reviewed. The student provided the following statement in digital story six, "…with a diagnosis of HIV, hypertension, hepatitis C, diabetes, acute pancreatitis, and anemia," in conjunction with the picture in Figure 4-28 to illustrate this attribute. The student author of digital story two demonstrated this attribute with the statement, "I suffer from chronic obstructive pulmonary disease and have difficulty walking," along with the picture in Figure 4-29.

Vulnerabilities during Life Transitions

There are six potential characteristics which comprise the knowledge domain of Vulnerabilities during life transitions. They are: health care decision making, palliative care, iatrogenesis, frailty, advocacy and environment of care. Figure 4-30 demonstrates the distribution of the characteristics across the six digital stories.

Health care decision making

Health care decision making encompasses the following aspects in regard to care of the elderly: patient wishes and expectations, family's wishes and expectations, patient belief systems (religious and/or spiritual), cultural considerations and the risk vs. benefits of expectations. Phrases demonstrated in the digital stories include, "I am going home to die with dignity and respect," (Figure 4-31) and "I know, I know, smoking is not good for me. But it does relax me," (Figure 4-32) are examples of this attribute.

Palliative care

Palliative care includes the areas of hospice and end of life decision making in its defining characteristics. Three of the six digital stories included this. "If it is my time, I want to join my wife," and "Hospice is not a place, but a concept of care," represent statements of this attribute. Figures 4-33 and 4-34 respectfully were used with these statements by the authors.

Iatrogenesis

Iatrogenesis refers to the potential or actual cascade disease pattern frequently found in the elderly client. Iatrogenesis was not an identified theme in any of the six digital stories.

Frailty

Defining characteristics for frailty included: needs assistance with activities of daily living, dependent on others for care, generalized weakness and weight loss. Five of the six digital stories had identifying characteristics of frailty. "He presented as weak and frail. He no longer assisted moving himself in bed," is a statement the student used to describe this in digital story four. The picture in Figure 4-35 (a shadow of a person standing) was used with this statement in the digital story.

Advocacy

Advocacy characteristics include who is the patient advocate and how is patient advocacy being demonstrated. The student author of digital story two used the following phrase to emphasize advocacy, "They give me orange juice, but I don't like it. The student nurse asked me why I never bring the orange juice they bring me every day and I told him. He went and told the nurse to get me apple or cranberry juice." Figure 4-36 is the associated photo the student employed with this statement.

Environment of care

     In considering the presence of themes related to environment of care the following elements are components of this attribute: family/caregiver's role, legal/ethical considerations for the patient, resources necessary for care (including access to care and financial) and safety of the environment and interdisciplinary collaboration. The presence of environment of care was the most common theme, found in all of the six digital stories. Phrases which include "…sometimes we play dominoes all day out on the front porch," and "…but then again he has seen some of the same staff for several years. They have become his 2nd family" are examples of environment of care presented in the first person and third person narrative format. Figures 4-37 and 4-38 respectfully represent the visual elements the students used with these phrases.

Additional Identified Themes

     The six digital stories were additionally analyzed for themes other than those identified in the ACES framework employing a content analysis approach (Glesne, 2011; Mayring, 2000; Polit & Tantano-Beck, 2004). One major theme and three sub-themes were identified. Figure 4-39 represents the taxonomy of these themes and associated codes. The major theme identified was *Individual Perception of Current Life Status*. The three identified sub-themes associated with this are: identity, reminiscing and attitude. A discussion of this theme and the three associated sub-themes is presented below.

Individual Perception of Current Life Status

     Each of the six digital stories contained information pertaining to the individual in a holistic view. Who they are based on their life experiences and the implications for their present state were identified in the three sub-themes.

Identity

Identity is a classified sub-theme discovered in the analysis process. The following codes were recognized as attributes of this sub-theme as they pertain to information presented about the patient: self, spouse, parent, child, grandparent, sibling and/or friend. The most common attribute among these was the identification of the individual based on their age. Phrases representing this include, "My name is JL. I am 89 years old," and "Hello, my name is W.P. and I was born in 1942 and I am 67 years of age." Associated pictures to represent this attribute included those in Figure 4-40 and Figure 4-41.

Reminiscing

Reminiscing was an identified sub-theme and was characterized as evidenced by the following coded information: where I'm from, family, what I did and/or what I had. These attributes can be seen in statements such as, "Due to his occupation, we got to travel a lot. I've been all around the world," and "You see this pic, this is our happiest family photo. Yup, oh I really loved that car. She was a real beauty." Images used to support these statements included those shown in Figure 4-42 and Figure 4-43.

Attitude

Attitude was an additional sub-theme identified in the content analysis. Included in the characteristics found during coding were elements of positive and negative attitude toward the patient's current life status. Isolated within the digital stories, statements such as: "I have lived a good life and this is where I am right now," and "Emotional and spiritual distress were both evident today," represent each element of attitude. Figures 4-44 and 4-45 are visual representations associated with these statements.

Summary

The research presented sought to explore the relationship between nursing students' digital stories and their understanding of the required knowledge to care for geriatric patients. The research aimed to investigate the use of digital storytelling as an innovative situational teaching strategy in the context of geriatric care to promote a greater understanding of the Advancing Care Excellence for Seniors (ACES) framework (NLN, 2011; Tagliareni, et al., 2012). The essential information required to care for geriatric patients is based on the understanding of the three knowledge domains of the ACES framework: individualized aging, complexity of care and life transitions. Additionally, the purpose of this research was to determine if there are further themes present in the students' digital stories in addition to those outlined in the ACES framework.

The results of Research Question 1 which sought to evaluate if the digital story rubric assesses the student learning outcomes as they relate to the ACES framework demonstrated an overall mastery of the ACES knowledge domains in groups one and two but not group three.

The results presented in relation to Research Question 2, which sought to determine if there are further themes present in the students' digital stories in addition to those outlined in the ACES framework demonstrated qualitative data to support the presence of the individual knowledge domains of the ACES framework present in the digital stories. An additional theme and three sub-themes were identified to support this research question using content analysis. An in-depth discussion of these results is presented in the Chapter 5 of this study.

Table 4-1. Individualized aging descriptive statistics

Variable	n	M (SD)	S^2	Range Potential	Actual
Group 1					
Instructor	6	3 (.00)	.00	0-3	3-3
Researcher	6	3 (.00)	.00	0-3	3-3
Group 2					
Instructor	6	3 (.00)	.00	0-3	3-3
Researcher	6	3 (.00)	.00	0-3	3-3
Group 3					
Instructor	10	1.7 (.67)	.46	0-3	1-3
Researcher	10	2.9 (.32)	.10	0-3	2-3

Table 4-2. Complexity of care descriptive statistics

Variable	n	M (SD)	S^2	Range Potential	Actual
Group 1					
Instructor	6	3 (.00)	.00	0-3	3-3
Researcher	6	2.67 (.52)	.27	0-3	2-3
Group 2					
Instructor	6	3 (.00)	.00	0-3	3-3
Researcher	6	2.83 (.41)	.17	0-3	2-3
Group 3					
Instructor	10	1.5 (.71)	.50	0-3	1-3
Researcher	10	2.5 (.85)	.72	0-3	1-3

Table 4-3. Vulnerabilities during life transitions descriptive statistics

Variable	n	M (SD)	S^2	Range Potential	Actual
Group 1					
Instructor	6	3 (.00)	.00	0-3	3-3
Researcher	6	2.67 (.52)	.27	0-3	2-3
Group 2					
Instructor	6	2.83 (.41)	.17	0-3	2-3
Researcher	6	2.17 (.75)	.57	0-3	1-3
Group 3					
Instructor	10	1.30 (.48)	.23	0-3	1-2
Researcher	10	2.8 (.42)	.18	0-3	2-3

Table 4-4. Total rubric scores descriptive statistics

Variable	n	M (SD)	S^2	Potential	Actual
				Range	
Group 1					
Instructor	6	9 (.00)	.00	0-9	9-3
Researcher	6	8.33 (1.03)	1.07	0-9	7-9
Group 2					
Instructor	6	8.83 (.41)	.17	0-9	8-9
Researcher	6	8 (.1.10)	1.20	0-9	6-9
Group 3					
Instructor	10	4.5 (1.35)	1.83	0-9	3-7
Researcher	10	8.2 (.79)	.62	0-9	7-9

Table 4-5. Digital story properties

Digital Story	Length (in minutes)	# of Digital Images	Patient Gender	Patient Age	Point of View
Digital Story 1	4.3	7	Female	89 years old	1st person - patient
Digital Story 2	8.3	9	Male	78 years old	1st person - patient
Digital Story 3	2.1	10	Female	77 years old	1st person - patient
Digital Story 4	6.1	10	Male	95 years old	1st person -student
Digital Story 5	3.1	12	Female	Not identified	1st person - patient
Digital Story 6	3.3	10	Male	67 years old	1st person - patient
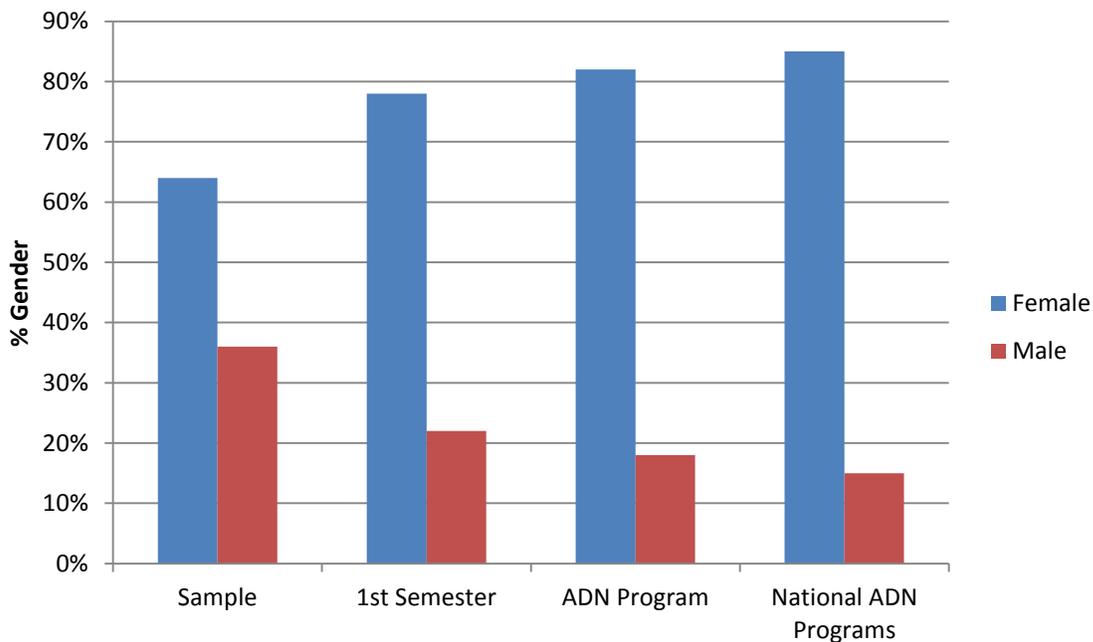
Figure 4-1. Gender distribution of the sample, the 1st semester enrolled students in this ADN program, the overall student population in the ADN program and overall national enrollment.
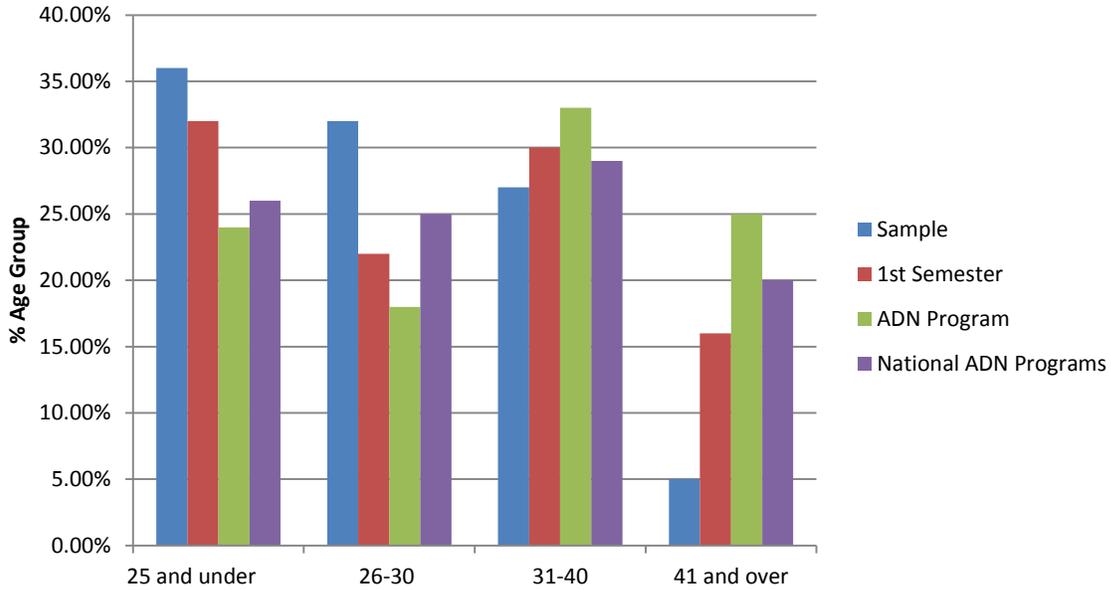
Figure 4-2. Age distribution of the sample, the 1st semester enrolled students in this ADN program, the overall student populaiton in the ADN program and the overall national enrollment.
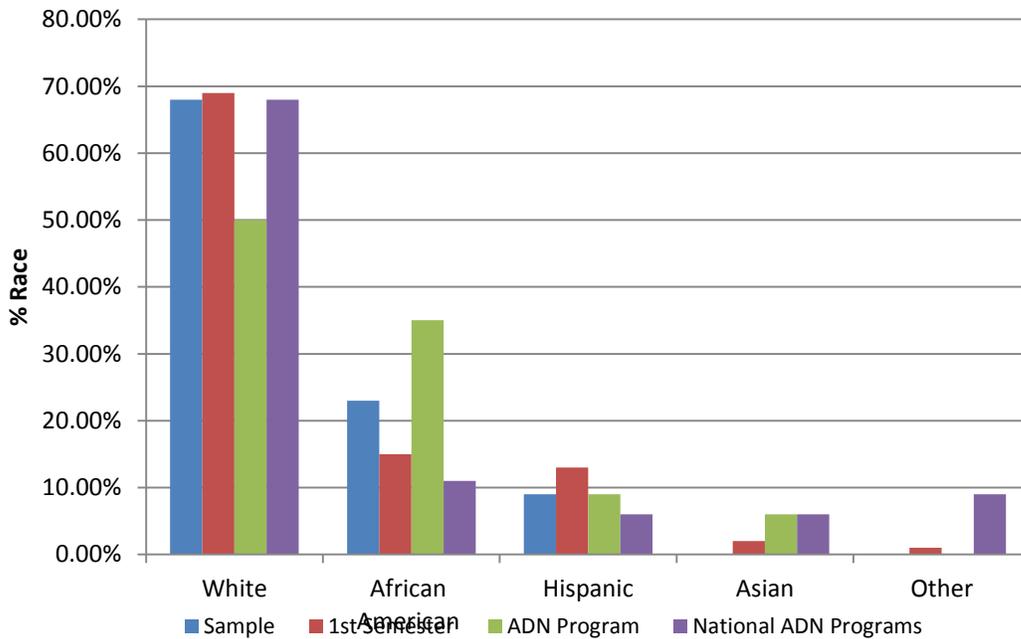
Figure 4-3. Race distribution of the sample, the 1st semester enrolled students in this ADN program, the overall student populaiton in the ADN program and the overall national enrollment.
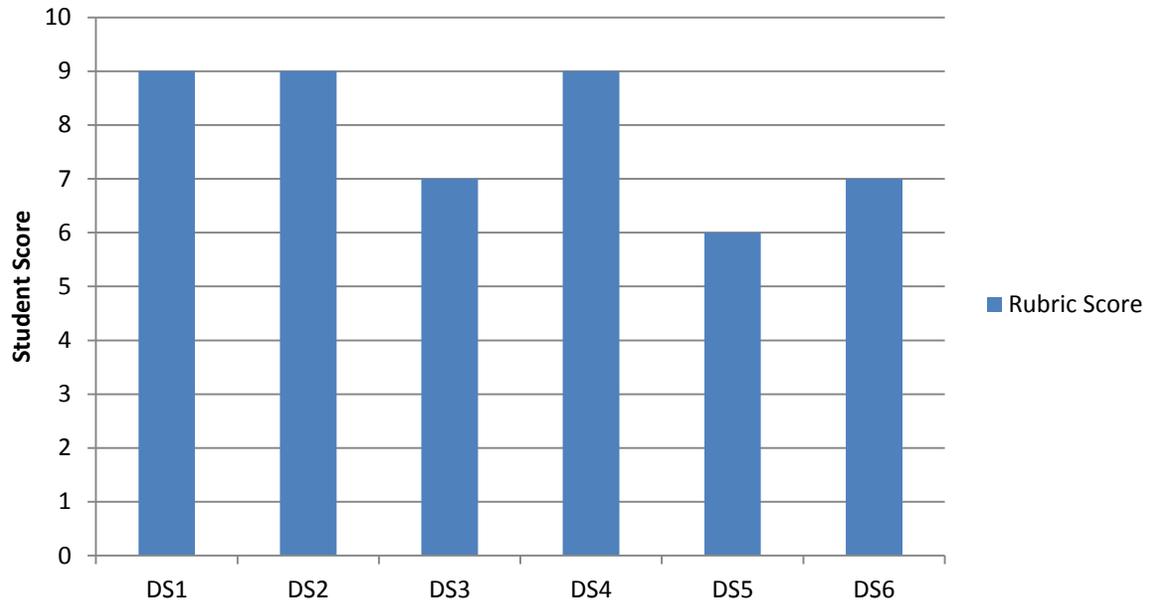
Figure 4-4. Student individual score on the ACES rubric. DS = digital story.

Predetermined Themes for Advancing Care Excellence for Seniors Framework

Advancing Care Excellence for Seniors Framework

Individualized Aging Knowledge Domain

Assessment of Function
Assessement of Cognitive Function
Atypical Presentation of Pain and Management of Pain
Assessment of Geriatric Syndromes
Assessment of Sexuality
Assessment of Violence and Elder Mistreatment

Complexity of Care Knowledge Domain

Geriatric Syndromes
Hydration Status
Infection
Poly-pharmacy
Depression
Dementia
Acute vs. Chronic Disease Process

Vulnerabilities During Life Transitions Knowledge Domain

Health Care Decision Making
Palliative Care
Iatrogenesis
Frailty
Advocacy
Environment of Care

Figure 4-5. Predetermined Themes for the ACES Framework
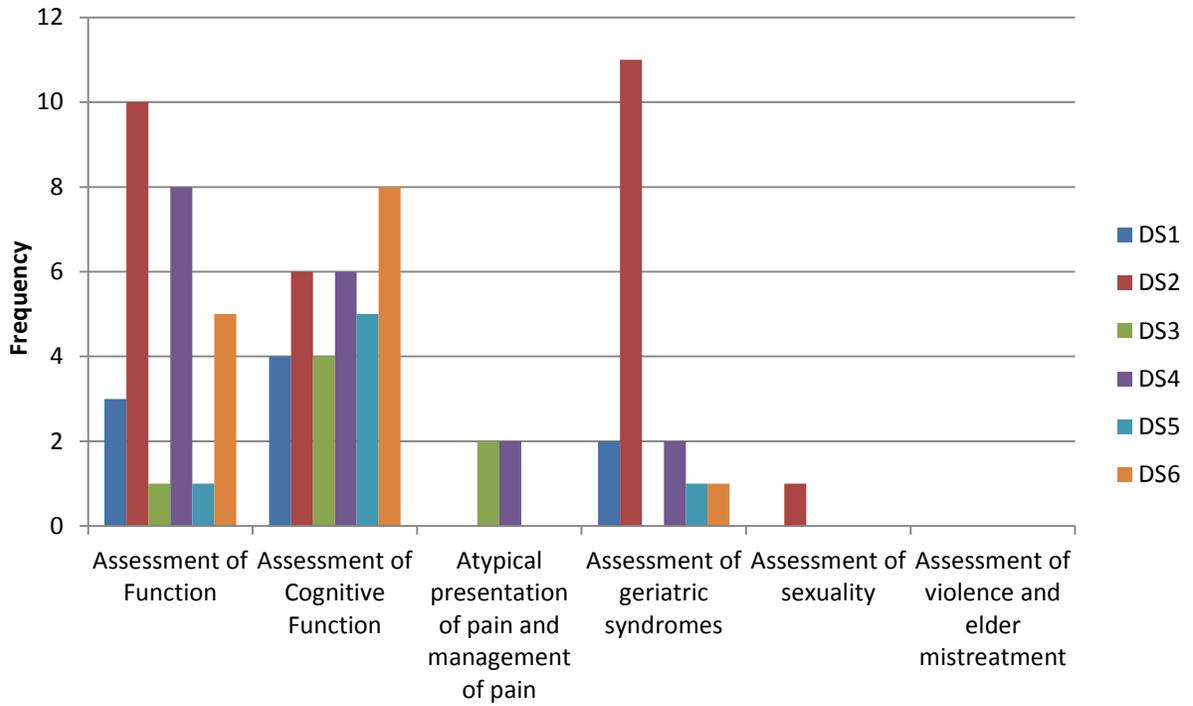
Figure 4-6. Frequency distribution of the characteristics identified in the individual digital stories as defined in the Individualized Aging knowledge domain.

Figure 4-7. Digital image from digital story 2 representing the Individualized Aging characteristic of assessment of function. Source author digital story two. Digital image courtesy of digital story two author.

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Figure 4-8. Digital image from digital story 4 representing the Individualized Aging characteristic of assessment of function. Digital image courtesy of digital story four author.

Figure 4-9. Digital image from digital story 1 representing the Individualized Aging characteristic of assessment of function. Digital image courtesy of digital story one author.

Figure 4-10. Digital image from digital story 3 representing the Individualized Aging characteristic of assessment of cognitive function. Digital image courtesy of digital story three author.

Figure 4-11. Digital image from digital story 4 representing the Individualized Aging characteristic of assessment of cognitive function. Digital image courtesy of digital story four author.

Figure 4-12. Digital image from digital story 3 representing the Individualized Aging characteristic of assessment of atypical presentation of pain and management of pain. Digital image courtesy of digital story three author.

Figure 4-13. Digital image from digital story 4 representing the Individualized Aging characteristic of assessment of atypical presentation of pain and management of pain. Digital image courtesy of digital story four author.

Figure 4-14. Digital image from digital story 6 representing the Individualized Aging characteristic of assessment of geriatric syndromes. Digital image courtesy of digital story six author.

Figure 4-15. Digital image from digital story 4 representing the Individualized Aging characteristic of assessment of geriatric syndromes. Digital image courtesy of digital story four author.

Figure 4-16. Digital image from digital story 4 representing the Individualized Aging characteristic of assessment of sexuality. Digital image courtesy of digital story four author.

Figure 4-17. Digital image from digital story 1 representing the Individualized Aging characteristic of assessment of violence and elder abuse. Digital image courtesy of digital story one author.
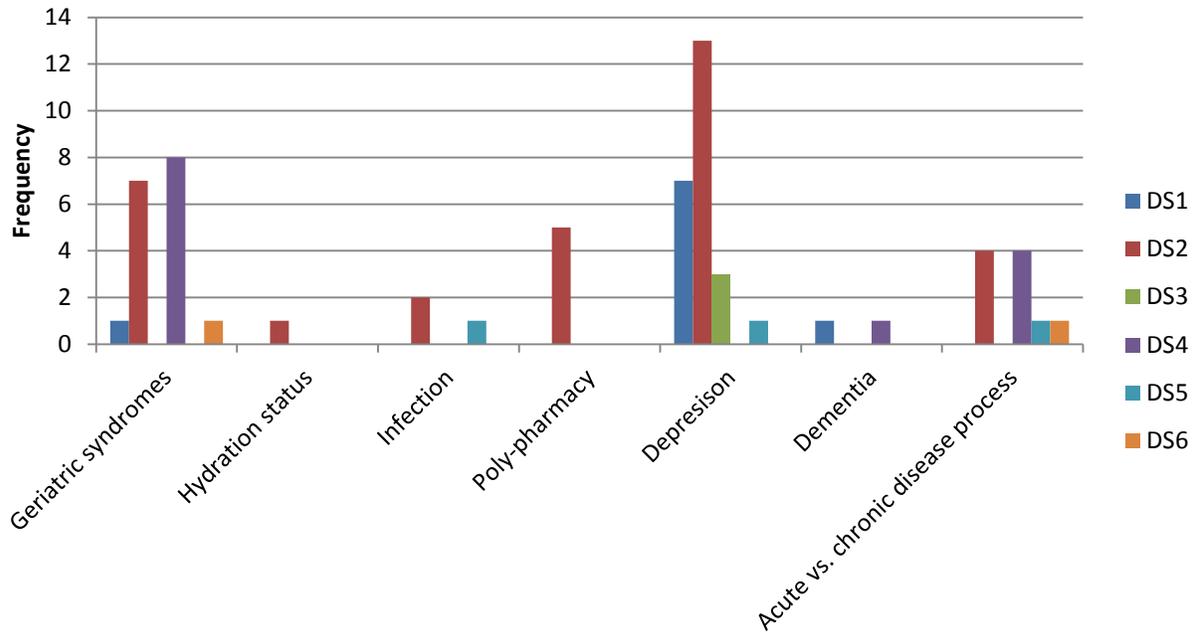
Figure 4-18. Frequency distribution of the characteristics identified in the individual digital stories as defined in the Complexity of Care knowledge domain.

Figure 4-19. Digital image from digital story 1 representing the Complexity of Care characteristic of geriatric syndromes. Digital image courtesy of digital story one author.

Figure 4-20. Digital image from digital story 4 representing the Complexity of Care characteristic of geriatric syndromes. Digital image courtesy of digital story four author.

Figure 4-21. Digital image from digital story 2 representing the Complexity of Care characteristic of hydration status. Digital image courtesy of digital story two author.
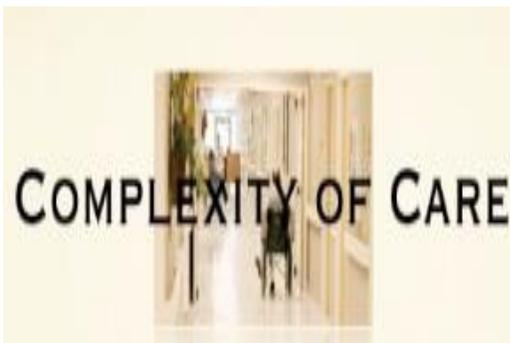
Figure 4-22. Digital image from digital story 2 representing the Complexity of Care characteristic of infection. Digital image courtesy of digital story two author.

Figure 4-23. Digital image from digital story 2 representing the Complexity of Care characteristic of poly-pharmacy. Digital image courtesy of digital story two author.

Figure 4-24. Digital image from digital story 3 representing the Complexity of Care characteristic of depression. Digital image courtesy of digital story three author.

Figure 4-25. Digital image from digital story 5 representing the Complexity of Care characteristic of depression. Digital image courtesy of digital story five author.

Figure 4-26. Digital image from digital story 1 representing the Complexity of Care characteristic of dementia. Digital image courtesy of digital story one author.

Figure 4-27. Digital image from digital story 4 representing the Complexity of Care characteristic of depression. Digital image courtesy of digital story four author.
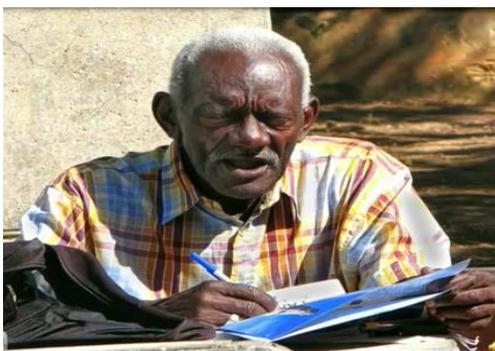
Figure 4-28. Digital image from digital story 4 representing the Complexity of Care characteristic of acute vs. chronic disease process. Digital image courtesy of digital story four author.

Figure 4-29. Digital image from digital story 4 representing the Complexity of Care characteristic of acute vs. chronic disease process. Digital image courtesy of digital story four author.
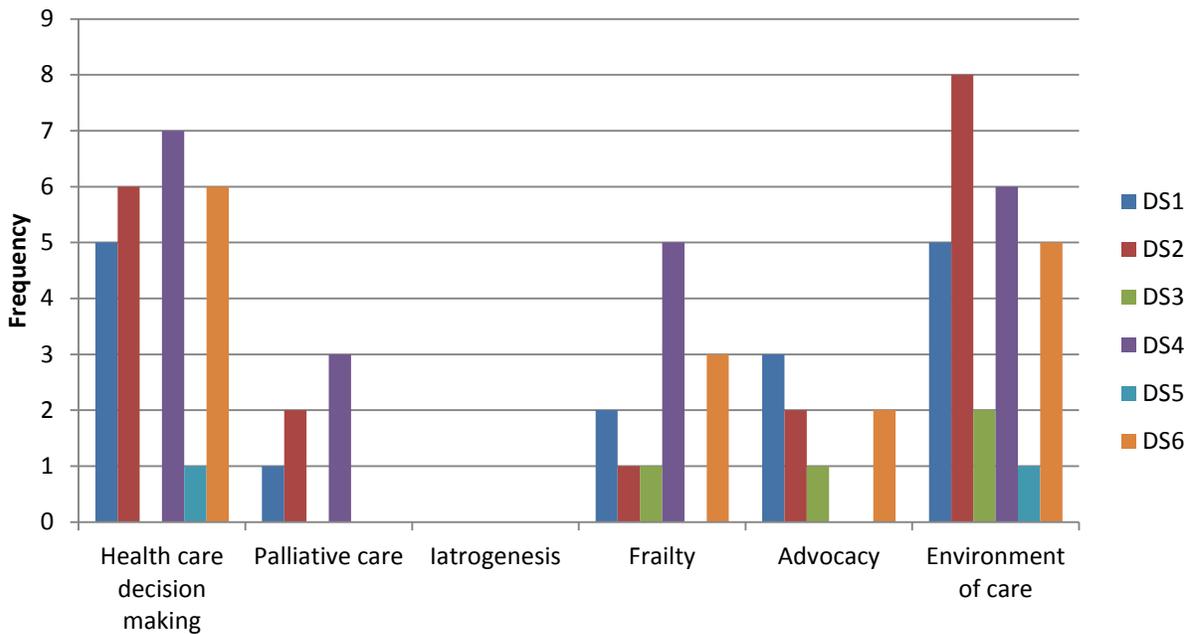

Figure 4-30. Frequency distribution of the characteristics identified in the individual digital stories as defined in the Complexity of Care knowledge domain

Figure 4-31. Digital image from digital story 1 representing the Vulnerabilities during Life Transitions characteristic of health care decision making. Digital image courtesy of digital story one author.

Figure 4-32. Digital image from digital story 1 representing the Vulnerabilities during Life Transitions characteristic of health care decision making. Digital image courtesy of digital story one author.

Figure 4-33. Digital image representing the Vulnerabilities during Life Transitions characteristic of palliative care. Digital image courtesy of digital story two author.

Figure 4-34. Digital image representing the Vulnerabilities during Life Transitions characteristic of palliative care. Digital image courtesy of digital story four author.

Figure 4-35. Digital image from digital story 1 representing the Vulnerabilities during Life Transitions characteristic of frailty. Digital image courtesy of digital story one author.

Figure 4-36. Digital image from digital story 2 representing the Vulnerabilities during Life
Transitions characteristic of advocacy. Digital image courtesy of digital story
two author.

Figure 4-37. Digital image representing the Vulnerabilities during Life Transitions
characteristic of environment of care. Digital image courtesy of digital story six
author.

Figure 4-38. Digital image representing the Vulnerabilities during Life Transitions characteristic of environment of care. Digital image courtesy of digital story four author.

Additional Themes Beyond Advancing Care Excellence for Seniors Framework

Individual Perception of Current Life Status

Identity

Reminiscing

Attitude

Self
Parent
Child
Friend

Spouse
Grandparent
Sibling

Where I'm from
Family
Things I did
Things I had

Positive
Negative
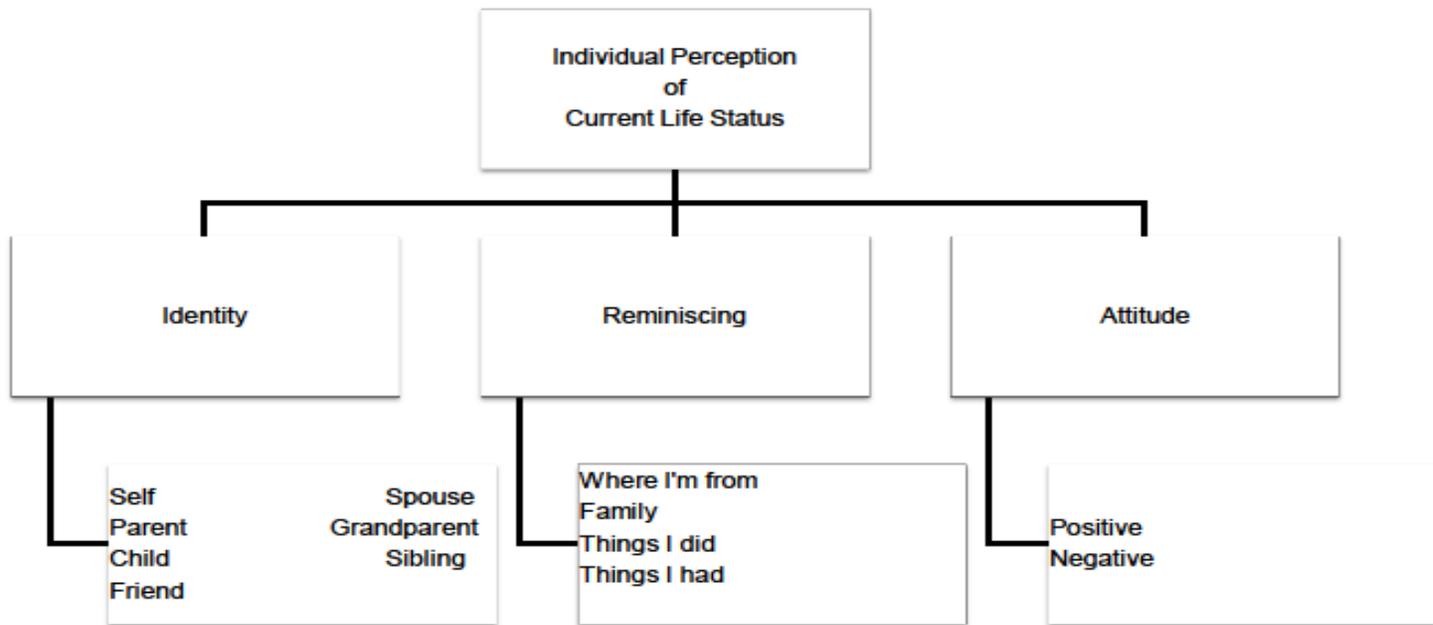
Figure 4-39. Additional themes identified beyond the ACES framework pre-determined themes.

Figure 4-40. Digital image representing the sub-theme Identity. Digital image courtesy of digital story one author.
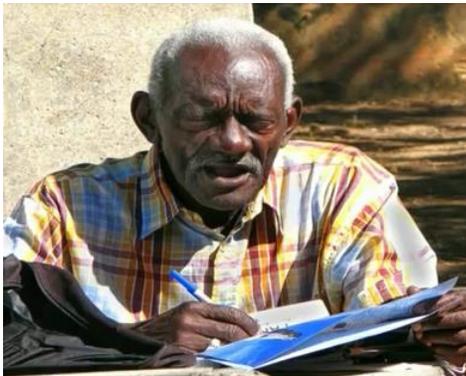
Figure 4-41. Digital image representing the sub-theme Identity. Digital image courtesy of digital story six author.

Figure 4-42. Digital image representing the sub-theme Reminiscing. Digital image courtesy of digital story three author.

Figure 4-43. Digital image representing the sub-theme Reminiscing. Digital image courtesy of digital story five author.

Figure 4-44. Digital image representing the sub-theme Attitude. Digital image courtesy of digital story two author.

Figure 4-45. Digital image representing the sub-theme Attitude. Digital image courtesy of digital story four author.

CHAPTER 5
DISCUSSION AND IMPLICATIONS

Chapter 5 of this dissertation presents a summary of the study, to include a discussion of important findings derived from the data presented in Chapter 4. It offers a discussion of the implications and recommendations for prospective research.

Summary of the Study

Overview of the problem

In conjunction with the need to expand the teaching and learning strategies in nursing education is the need to improve the ability of health care workers to care for older Americans (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; Mion, 2003; National League for Nursing, 2009; Tagliareni & McLaughlin, 2007). Specifically there is a need for increasing the competence of all individuals, including nurses, in the delivery of geriatric care (Institute of Medicine of the National Academies, 2008).

Purpose statement and research questions

This dissertation explored the relationship between nursing students' digital stories and their understanding of the required knowledge to care for geriatric patients. The research aimed to investigate the use of digital storytelling as an innovative situational teaching strategy in the context of geriatric care to promote a greater understanding of the Advancing Care Excellence for Seniors (ACES) framework (NLN, 2011; Tagliareni, et al., 2012). The essential information required to care for geriatric patients is based on the understanding of the three knowledge domains of the ACES framework: individualized aging, complexity of care and life transitions. Additionally, the research sought to determine whether there were further themes present in the students' digital stories in addition to those outlined in the ACES framework. As such, the research questions which guided this study are:

RQ1. Does the digital story rubric assess the student learning outcomes as they relate to the ACES framework?

RQ2. What themes are found in the digital stories in addition to those assessed by the ACES rubric?

Review of the methodology

This study employed a mixed method, non-experimental research design using a concurrent triangulation approach (Creswell, 2009; Onwuegbuzie & Leech, 2006). In the concurrent triangulation approach, the data for the quantitative and qualitative research is collected at the same time. The research questions sought to discern whether quantitative and qualitative data provide opportunity to inform the research questions. Graded rubrics for the students' digital stories were examined for mastery of the learning outcomes. From the same sample of digital stories, students' stories were examined using a thematic or content analysis approach to identify common characteristics within the digital stories. This represented a systematic approach to analyzing the themes derived from the stories into major categories for the purpose of interpretation (Bowen, 2009; Glesne, 2011). These themes were then compared to the identified components of the knowledge domains of the ACES framework. This allowed for the potential to discover any additional themes within the digital stories beyond the identified ACES knowledge domains.

Major Findings

Research Question 1: Does the digital story rubric assess the student learning outcomes as they relate to the ACES framework?

Findings

The research aimed to investigate the use of digital storytelling as an innovative situational teaching strategy in the context of geriatric care to promote a greater understanding of the Advancing Care Excellence for Seniors (ACES) framework. The first research question sought to explore the relationship between the student's digital

story and their understanding of the required knowledge to care for geriatric patients. Descriptive statistics and analysis of variance procedures were used to analyze the data. All of the digital stories were evaluated by both the group's instructor and the researcher. The intra-class correlation for the sample while not significant provided evidence of acceptable reliability. The three knowledge domains of the ACES framework are individualized aging, complexity of care and vulnerability during life transitions (NLN, 2011; Tagliareni, et al., 2012).

Seventeen students (77%) in the sample demonstrated a mastery of the individualized aging knowledge domain at a minimum of 75% (raw score of 2.25), which is considered passing for this ADN nursing program. Sixteen students (73%) in the sample demonstrated a mastery of the complexity of care knowledge domain at a minimum of 75% (raw score of 2.25). Fourteen students (64%) in the sample demonstrated a mastery of the complexity of care knowledge domain at a minimum of 75% (raw score of 2.25). Seventeen students (77%) in the sample demonstrated an overall mastery of the ACES knowledge domains at a minimum of 75% (raw score of 6.75). The group data were analyzed by using a one-way between subjects ANOVA, where instructional group served as the factor and score served as the outcome variable. Results for each individual knowledge domain and the total rubric scores indicate there was a significant difference between at least one of the instructional groups. Using the Bonferroni correction to adjust for multiple comparisons at a 95% confidence level there was a significant difference in each knowledge domain and in the total rubric score results between group three and groups one and two. These findings are consistent with current research utilizing digital storytelling as a teaching tool. Digital storytelling has been demonstrated as having the ability to facilitate gaining experience

and understanding about life in a variety of contextual settings (Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Skouge & Rao, 2009; Stacey & Hardy, 2010).

Overall, the rubric demonstrated assessment of the students' understanding of the ACES framework. The utilization of the rubric provided the ability to discern which knowledge domains were most reflected in the digital stories and those least present. The group three rubric scores were significantly different than those of group one and two.

Discussion of caring qualities

The art of nursing has been illustrated as an expression of sympathy, attitudes of concern, ethical and moral commitment and sensitivity to feelings of others(Dunphy, 2001; Peplau, 1988). The National League for Nursing (NLN) (2011) describes caring as promoting health, healing and hope in response to the human condition and considers it a central tenet in the nursing profession. It includes the intentionally formed relationships and competencies developed over time through self-reflection, observation of role models and experience (Sadler, 2003). The National League for Nursing Accreditation Commission (NLNAC) requires ADN programs to include components which address caring in their curriculum as requirements for accreditation (NLNAC, 2011). Duffy (2003) demonstrated the nurse-patient relationship characterized by caring has a positive influence on the outcomes for patients/families, and healthcare systems.

The federal government has attached funding and reimbursement incentives to many of the caring qualities, with mandatory reporting using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. This has led to an increase focus within healthcare facilities of employee and potential employees'

attitudes towards caring for others. This is an additional reason to incorporate intentional opportunities to provide students with educational experiences that will expand their caring attitudes, in nursing educational programs.

Issel and Khab (1998) identified seven specific behaviors related to caring which have economic value in healthcare. The authors identified five consequences of the outlined caring behaviors related to finances of a healthcare organization. Patient satisfaction as a consequence has the potential to generate revenue for the healthcare organization. Physiological, self-disclosure and self-esteem are individual consequences which when met with caring behaviors have the prospective to avoid additional costs. Lastly, legal is considered a probable cost saving consequence as a result of the other four.

Digital storytelling has been demonstrated as having the ability to facilitate gaining experience and understanding about life in a variety of contextual settings (Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Skouge & Rao, 2009; Stacey & Hardy, 2010). The successful students' outcomes demonstrated by the ACES rubric scores provide evidence for continued promotion of digital storytelling to enhance student's ability to care. Specifically, in this study, the students were identified as demonstrating expressions of sympathy, attitudes of concern, ethical and moral commitment and sensitivity to feelings of others (Dunphy, 2001; Peplau, 1988).

Discussion of attitudes toward older adults

In addition to caring being central to potential patient outcomes, attitudes toward the elderly are likewise an important factor to outcomes for the elderly in health care settings. Attitudes have been defined as "ideas charged with emotion which predisposes a class of actions to a particular class of social situations" (Triandis, 1971).

Dwyer (Dwyer, 1993) expanded on this definition by identifying three key components to attitudes. These include: a cognitive component (the idea), an effective component (the emotion) and a behavioral component (the action).

Ageism is defined as predisposition toward older adults through attitudes and resulting actions (Stanley, Blair, & Beare, 2005). Ageism can be seen in the arena of patient education. Research has demonstrated that older patients receive less information related to their health, illness and available resources than younger patients (Ayranci & Ozdag, 2006). Negative attitudes toward the elderly can thus lead to miscommunication or less than optimal patient education and result in poor patient compliance and/or outcomes. There is research which supports the belief that behavior toward older adults appears dependent upon their attitudes of the elderly (Sinnott, Raval, & Shiffman, 1983). Cozart (2008) identified the need for positive attitudes towards older adults to provide optimal care and that historically nursing students attitudes toward the elderly are negative. The overall postive outcome of the ACES rubrics signifies a deeper understanding of the complex nature of the care of the elderly patient. The digital stories demonstrated respect for the elder patient and lacked signs of ageism. One digital story author began his reflection with identifying his own negative beliefs about aging which have changed since this experience.

Discussion of contextual teaching strategy

Research has demonstrated a need for registered nursing curricula to include teaching and learning strategies which will facilitate the development of clinical reasoning, to include understanding the context of the situation from the viewpoint of the patient's life. This encompasses teaching students to consider a patient through the multiple lenses of culture, daily environment, illness experience and their relationships

with significant others in their lives (Benner et al., 2009; Diekelmann, Ironside, & Gunn, 2003;Ironside, 2006). Story telling as a teaching and learning tool in nursing education is an established mechanism to promote reflecion and demonstrate a deeper understanding of events (Diekelmann, 2001; Ironside, 2003; Nehls, 1995). Narrative presentation of experiences encourages reflective thinking and may increase the understanding of what was learned and how it was learned (Diekelmann, 2004). The overall results of the outcomes of this research study based on the rubric scores, validates the use of digital storytelling as prescribed in this assignment as a mechanism for this type of learning to occur.and the ability for students to be assessed.

Discussion of instructor impacts

The teaching methods of the individual clinical instructors may have impacted the students' outcome on their ability to demonstrate the ACES framework in a digital story. Nursing clinical instructors have been identified as having two distinct views of nursing, patient centered or nurse centered. The clinical instructors view has been demonstrated to impact the view of the students they are teaching (Dahike, Baumbusch, Affleck, & Kwon, 2012). The clinical instructor who has a nursing view which is nurse-centered would be less likely to view the elderly through the multiple knowledge domains of the ACES framework. Gignac-Caile and Oermann (2001) identified a significant difference in the perception of students and faculty as it related to effective clinical instructors. Students identified evaluation characteristics as most import while faculty identified interpersonal relationships as most important. These findings may have impacted rubric grading if during the clinical rotation the clinical instructor did not recognize the student as having developed an interpersonal relationship with their patient. Clinical instructors have identified an ambiguity in their defined role as a facilitator of student learning.

Included in this is a lack of knowledge related to the curriculum (Finn, King, & Thorburn, 2000). As each of these instructors have attended professional development workshops related to the ACES framework and its implementation in the current nursing curriculum this should not have impacted the outcomes on the ACES rubric. One of the acknowledged differences in the three clinical instructors is one of the instructors was Finnish and English is her second language. This may have influenced her interpretation of the students' transcripts and photos when grading the digital stories.

Discussion of the ACES rubric

The ACES rubric was shared with the students as part of the assignment. The rubric focused solely on the ACES content within the digital story; as such it was not an inclusive evaluation tool of the students' digital stories. It did not evaluate the digital story for any additional considerations, including but not limited to the presence of elements of a story or the use of technology in the finished product. This rubric design limited the ability to assess the full depth of the assignment for critical elements to a successful digital story. The rubric would have benefited from incorporating areas to enhance the likelihood of more students demonstrating the inclusion of rich story elements and increased sophistication of the integration of technology to deliver their message.

Discussion of the assignment context

The context of the assignment in the curriculum adds an additional area for consideration. This assignment is part of a first semester nursing course at a public state college in the Southeastern United States. Many of these students are just beginning their foray into the healthcare arena and are overwhelmed with both the coursework and the responsibility of caring for another human being. Time management

skills along with higher course expectations could have impacted the potential end product for this assignment. The course this assignment is attached to is graded pass/fail and students understand this is a small portion of their final clinical grade. The amount of time required to produce a well-crafted digital story after the seven week rotation may have been overwhelming in conjunction with their other course, work and family responsibilities. The use of technology which they were unfamiliar with may have caused additional strain in their lives. This assignment may be better served either later in the curriculum or in a BSN completion course where a "seasoned" nurse might be more successful at understanding the time and knowledge required to successfully produce an exemplar digital story.

Research Question 2: What themes are found in the digital stories in addition to those assessed by the ACES rubric?

The second research question sought to explore what themes are found in the digital stories in addition to those assessed by the ACES rubric. Six purposively selected digital storytelling stories, which demonstrated the three elements of a story as identified by Labov (2011), were analyzed. The six digital stories selected for in-depth review were analyzed using a thematic and template or content analysis format (Glesne, 2011; Mayring, 2000; Polit & Tantano-Beck, 2004). This research design allowed for potential emergent themes not identified by the ACES framework to be discovered.

ACES framework themes findings

The analysis of the six digital stories revealed the presence of each of the knowledge domains as defined by the ACES framework. Within the knowledge domain of individualized aging, the most common themes identified were related to the functional ability of the patient, both physical and cognitive. The themes most prevalent

within the knowledge domain of complexity of care were geriatric syndromes, depression and acute vs. chronic disease conditions. The knowledge domain of vulnerability during life transitions was noted to have the following themes represented most frequently: healthcare decision making and environment of care.

Digital storytelling promotes the use of reflection as a means to integrate new understanding, in context, into one's experience in order to make better choices in the future (Christiansen, 2011; D'Alessandro, Lewis & D'Alessandro, 2004, McLellan, 2006). The first semester nursing students who authored these digital stories have completed along with their clinical course, a didactic course which introduces the fundamentals of nursing. The focus in the didactic course is patient assessment, to include geriatric syndromes, introduction to altered cognitive status and healthcare decision making for patients and families. Consistent with the research these are the most prominent ACES themes demonstrated in the digital stories.

Within each of the six digital stories transcripts, elder mistreatment or abuse was not present. However, within the digital pictures one student utilized a photo which represented this sub-theme. Elder abuse is defined as intentional actions that cause harm or the potential serious risk of harm to a vulnerable elder by a person who stands in a trust relationship to the elder. This includes failure by a caregiver to insure the elder's basic needs are met or to protect them from harm. The harm can be intentional or unintentional in nature (Hooyman & Kiyak, 2011; Lachs & Pillemer, 2004; Touhy & Jett, 2010). The incidence of elder abuse is estimated at between 7.6%-10% annually (Department of Health & Human Services, 2013; McBride, 2011; Plitnick, 2008). With the significant actual and/or potential of elder abuse, nursing students need to understand this multifaceted healthcare issue. Review of the current textbook used by

the students in this ADN program revealed one paragraph dedicated to this topic. Although the topic is discussed in their didactic course, the course resource does not substantiate the importance of this topic. The use of digital storytelling in higher education has been employed as a learning resource. Research has demonstrated both individual and peer reflective learning by observing digital stories created by others. Students are able to integrate new understanding of the circumstances into their personal conceptualization of the content (Cheng & Chau, 2009; Christiansen, 2011; Czarnecki, 2009; D'Alessandro, Lewis, & D'Alessandro, 2004; Heo, 2009; McLellan, 2007; Sandars & Murray, 2009; Stacey & Hardy, 2010). Based on these findings, additional intentional learning encounters should be developed to aid students in identifying and understanding the nature and prevalence of elder abuse.

Iatrogenesis is defined as the emerging development of multiple medical conditions as a result of the health care environment or health provider interventions. An example of iatrogenesis is the elderly patient, who is agitated and sedated, which may lead to disorientation, dizziness and falling. This in turn could lead to additional injury resulting in an extended hospital stay associated with the need for surgery or complex medical attention from the injury and increased health care costs. These events themselves have the ability to perpetuate the cascade of iatrogenesis further. It occurs more frequently with older adult patients in hospitals, rehabilitation and long term care settings. The associated outcomes for these patients are a poorer discharge prognosis and an increase in potential medical care costs (Klein, 2002; Mitty, 2010; Thornlow, Anderson, & Oddone, 2009). Iatrogensis as a sub-theme was not identified within the transcripts or photos in all six digital stories. Review of the current textbook used by the students in this ADN program revealed five sentences dedicated to iatrogenic

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infections only. The textbook does not discuss or define model of iatrogenesis in the health care system. As with elder abuse, although the concept of iatrogenesis is discussed in their didactic course, the course resource does not substantiate the importance of this topic. Based on these findings, additional intentional learning encounters should be developed to aid students in identifying and understanding iatrogenesis.

Discussion

The National Council of State Boards of Nursing (2012) report that 56.1% of new graduates report caring for older adult clients aged 65 to 85 with an additional 27.8% reporting caring for older adult clients aged 85 or older (NCSBN, 2012).In 2008, the Institute of Medicine (IOM) published a report calling for a national agenda to improve the ability of health care workers to care for older Americans. Specifically addressed in this, was a need for increasing the competence of all individuals, including nurses, in the delivery of geriatric care (Institute of Medicine of the National Academies, 2008).

In 2011, the first baby boomers began to turn 65 years old. It is estimated that there are over 78 million Americans born between the years of 1946 to 1964 (Centers for Disease Control and Prevention, 2003; Centers for Disease Control and Prevention and The Merck Company Foundation., 2007; U.S. Census Bureau, 2008). Over the next 25 years, the number of individuals over the age of 65 in the United States will almost double. This translates into individuals over the age of 65 making up approximately 20 percent of the total population (Centers for Disease Control and Prevention, 2003; Centers for Disease Control and Prevention and The Merck Company Foundation., 2007; U.S. Census Bureau, 2008). Given the growing population over the age of 65, there is a need to implement innovative strategies to prepare pre-licensure nursing

students in the care of older adults (Ironside, Tagliareni, McLaughlin, King, & Mengel, 2010; Mion, 2003; National League for Nursing, 2009; Tagliareni & McLaughlin, 2007). These students demonstrated their understanding of the unique needs and challenges faced when caring for the older adult through their digital stories. This understanding has the potential to improve geriatric patient care and outcomes thus decreasing medical costs. It has been established that nurses who care for older adults and personalize and internalize the importance of their care have a positive impact on their outcomes (Tagliareni, et al., 2012; Tagliareni & McLaughlin, 2007; National League for Nursing, 2009).

Additional identified themes findings

The six digital stories were additionally analyzed for themes other than those identified in the ACES framework employing a content analysis approach (Glesne, 2011; Mayring, 2000; Polit & Tantano-Beck, 2004). One major theme and three sub-themes were identified. The major theme identified was Individual Perception of Current Life Status. The three identified sub-themes associated with this are: identity, reminiscing and attitude. Each of the six digital stories contained information pertaining to the individual in a holistic view. Who they are based on their life experiences and the implications for their present state were identified in the three sub-themes.

Erik Erikson's psychosocial theory of human development corresponding stage for older adults is Maturity. Erikson describes each stage as a process of working through a set of psychosocial tasks. In the Maturity stage the psychosocial tasks are integrity vs. despair. The main components of this stage surround the adult feeling satisfied with their life (Salkind, 2004). Characteristics of integrity include: realistic and insightful self-awareness, reasonably optimistic, connected to family, friends and the community and

content with their experiences and achievements. Characteristics of despairing include: depressed about life disappointments and failures, missed chances in life, expressions of sadness, regret or failure and insufficient sense of belonging and not enough time left to find fulfillment (Hearn, et al., 2012). The identified theme and three sub-themes are reflective of this theoretical context.

Discussion

Nursing education is increasingly challenged with a demand for including new content or concepts in an already overburdened curriculum (Pressler & Kenner, 2009) Faculty consider the teaching of caring a difficult process and a concept that is less important than one they would designate as critical. Additionally, the literature identifies a lack of understanding or empathy among nursing students towards the clients they care for (Gramling & Nugent, 1998). Anecdotal statements such as: "…they're (students) in it just for the money," or "…it was the only way they (students) could get a job" are a clear concern that nursing students need directed opportunities to enhance their development of caring.

The art of nursing has been illustrated as an expression of sympathy, attitudes of concern, ethical and moral commitment and sensitivity to feelings of others (Dunphy, 2001; Peplau, 1988). The National League for Nursing (NLN) (2011) describes caring as promoting health, healing and hope in response to the human condition and considers it a central tenet in the nursing profession. It includes the intentionally formed relationships and competencies developed over time through self-reflection, observation of role models and experience (Sadler, 2003). The richness of the students' digital stories clearly demonstrated expressions of sympathy, attitudes of concern, moral and ethical commitment and sensitivity to feelings of others. This demonstrates the positive

potential impact digital storytelling can have on guiding students to develop deeper caring constructs in their practice.

Storytelling in education has been instrumental in helping students make meaning of complex human conditions and life events (Burk, 2000). Abrahamson (1998) identifies critical reflection as an effect of utilizing stories in the classroom. Stories become the manner in which students can process the complex nature of what they are being presented in the classroom thus forging a learning community of shared views. Digital storytelling has been revealed to promote reflective learning in healthcare professional education. Digital storytelling promotes the use of reflection as a means to integrate new understanding, within the context of transitioning to professional nurse, into one's experience in order to make better choices in the future. It has been shown that the sharing of stories, particularly in health and medicine can promote new insights and knowledge through reflection for both patients and healthcare providers as either creators and/or consumers of these digital stories (Christiansen, 2011; D'Alessandro, Lewis & D'Alessandro, 2004, McLellan, 2006).

The discovery of the additional theme and sub-themes demonstrates the effectiveness of digital storytelling in enhancing students' understanding of the holistic approach to patient care in geriatrics. It is through both the telling and sharing of stories that nursing students come to recognize and understand qualitative distinctions in patient situations (Benner, Hooper-Kyriakidis, & Stannard, 1999; Ironside, 2003). Digital storytelling provides a potential new medium to develop, deliver and share these narratives which will enhance students' ability to consider a patient through the multiple lenses of culture, daily environment, illness experience and their relationships with

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significant others in their lives (Benner et al., 2009; Diekelmann, Ironside, & Gunn, 2003;Ironside, 2006).

Limitations

Limitations for this study include both quantitative and qualitative concerns (Creswell, 2009; Onwuegbuzie & Leech, 2006). There is a threat to external validity due to the participants belonging to a convenience sample. This may limit the generalizability of the findings (Creswell, 2009). Inter-rater reliability and content validity of the ACES rubric were established. However, this is the first time the ACES rubric will be used on a large scale to assess the level of student learning outcomes. Additionally, researcher bias in evaluating the digital stories for thematic analysis cannot be ignored (Glesne, 2011). The researcher is a project staff member and has worked with the project throughout the development and national launch of the ACES framework. As previously discussed, two of the instructor/graders were American, Caucasian women. The third instructor was Finnish and English is her second language. This may have contributed to the difference in her interpreting and grading the students' digital stories and impacted the study outcomes.

Conclusions

This research has demonstrated the ability to measure students' level of success in meeting learning outcomes related to understanding and integrating the ACES framework in their digital stories. The ACES rubric consistently measured the associated defined characteristics within the distinct knowledge domains of the ACES framework. The use of the ACES rubric also identified which areas of the knowledge domains were most prevalent and those the least represented.

The thematic analysis using the predetermined ACES knowledge domains and characteristics reaffirmed the findings using the ACES rubric. This demonstrated concurrent triangulation of data by using the data collected simultaneously in both a quantitative and qualitative research approach to compare results afterward. These research methods led to an increase confidence in the ability of the ACES rubric to measure the stated ACES framework knowledge domains and be utilized to measure learning outcomes.

The additional content thematic analysis demonstrated students' perceptions of their patient as it relates to Erikson's eighth stage of development, Maturity (Salkind, 2004). The use of digital storytelling allowed students to express their understanding of "whom" and "where" their assigned patient was in dealing with the circumstances of growing old. Although this was not an outlined part of the reflective assignment, it demonstrates how through the construction of their digital story, the students were encouraged to reflect on the seven weeks they spent with this individual patient and were able to translate this into meaning in their stories.

Implications for action

The ACES framework was launched by the NLN in 2009. It provides for a conceptual framework in which students can gain understanding of the importance of individualized aging, complexity of care and life transitions, using evolving geriatric knowledge to provide care for the older adult (NLN, 2011; Tagliareni, et al., 2012). National accrediting organizations for nursing programs require the documentation of student learning outcomes to include valid and reliable mechanisms to assess them (Halstead, 2007; Lowenstein & Bradshaw, 2001; National League for Nursing Certification Governance Committee, 2005). With the need to demonstrate student

accomplishments through measurable outcomes, the successful implementation of the ACES rubric will allow for a widespread dissemination of the rubric through the NLN and serve as a tool to assist other nursing programs with measuring these outcomes.

The research aimed to investigate the use of digital storytelling as an innovative situational teaching strategy in the context of geriatric care to promote a greater understanding of the ACES framework. The success of this research will empower others to utilize digital storytelling in a variety of healthcare settings, to enhance students' understanding of contextually specific care for their patient population.

Recommendations for further research

Findings in this dissertation were void of direct student analysis in conjunction with the thematic analysis of the digital stories. Qualitative research which would seek to discover the similarities and/or differences of the researcher/instructor's analysis of the students' digital stories may shed additional light on the student's intent or understanding of the ACES framework. Additionally, this approach has the potential to discover any additional interpretations of the transcribed stories and associated pictures chosen by the students' in their story construction.

Research concerning the students' perception of their understanding of the ACES framework by viewing these stories created by others and the potential for enhanced reflective learning in this situation as described in other educational venues would be an area for future research exploration (Cheng & Chau, 2009; Jenkins & Londsdale, 2007; McLellan, 2007; Sandars & Murray, 2009; Stacey & Hardy, 2010). Investigation into the impact sharing digital stories among a single cohort has additional implications for reflective learning to occur is an additional consideration for future research (Christiansen, 2011; D'Alessandro, Lewis, & D'Alessandro, 2004; McLellan, 2007).

Closing remarks

In conclusion, this study demonstrated the ACES rubric as being successful in measuring student learning outcomes related to the ACES framework. The qualitative research further strengthened this finding by establishing the presence of the ACES knowledge domains and defining characteristics embedded in the digital stories. The additional thematic analysis of the digital stories demonstrated reflective processing by the student in understanding the life stage of their patient in the aging continuum. I believe the use of digital storytelling in nursing education has the potential to engage the student in forming a deeper understanding of the varied population and needs of the patients they care for.

APPENDIX A
INSTITUTIONAL REVIEW BOARD

UF | **Institutional Review Board**
UNIVERSITY *of* **FLORIDA**
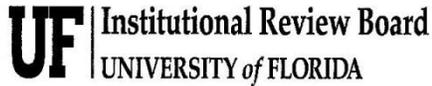
PO Box 112250
Gainesville, FL 32611-2250
352-392-0433 (Phone)
352-392-9234 (Fax)
irb2@ufl.edu

February 2, 2012

TO: Kellie Bassell
               4200 Congress Avenue MS #31
               Lake Worth, FL 33461

FROM: Ira S. Fischler, PhD; Chair
               University of Florida
               Institutional Review Board 02

SUBJECT: **Exemption of Protocol #2012-U-0093**
               Reflective Learning and Caring Efficacy

SPONSOR: None

Your protocol has been reviewed the IRB. The Board has determined that your protocol is exempt based on the following categories:

> *45 CFR 46.101(b(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.*

> *45 CFR 46.101(b) (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.*

Should the nature of your study change or if you need to revise this protocol in any manner, please contact this office before implementing the changes.

IF:dl

Palm Beach State
Personnel

Palm Beach State College
Research/Study Approval

Name: Kellie Bassell   Date: 2/7/12

Title: Nursing Program Director

Cluster/Department: Nursing

Title of research/study: Reflective Learning & Caring Efficacy

Purpose of study: To determine if there is a difference in nursing students
Caring Efficacy upon completion of a LTC rotation & reflective assignment.

Level I Approval: (cluster/department administrator)

Name: JACQUELINE ROGERS   Title: Dean, Health Sciences and

Signature: [signature]   Date: 2/7/12   Public Safety

Level II Approval: (provost)

Name: Maria M. Vallejo   Title: Provost

Signature: [signature]   Date: 2/9/12

Level III Approval: (Institutional Research & Effectiveness)

Name: [signature]   Title: Dir, IRE

Signature: Jennifer Campbell   Date: 2/9/2012

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APPENDIX C
LONG TERM CARE ROTATION --SUMMARY OF EXPERIENCE

Based on your experience and knowledge working with the ACES framework, create a digital story about a resident you cared for during your long term care rotations. (You may use the questions listed below as a guide.)

Introduction

1. Introduce your resident.

Individualized Aging

1. What elements do you feel are integral to the resident's care regarding their individualized aging?

2. What is the baseline functional and cognitive status of this resident? What data/evidence is used to support this? Is there a conflict between what is baseline and what is perceived by the resident and/or caregiver?

Complexity of Care

1. What multiple co-existing acute and chronic conditions may generate tension between immediate and long term needs of your resident?

2. What concerns did you have in the relation to the complexity of your resident did you have?

Vulnerabilities During Life Transitions

1. What are the resident and/or family expectations of outcomes of care?

2. What is the family or caregiver understanding of the resident's definition of quality of life?

5. What are the resident and/or caregivers understanding of patient safety concerns?

6. What were the risks and benefits of the safety concerns?

Resources to help you create your digital story:

http://www.patricklowenthal.com/digitalstory/tie/jobaids/ppt+digitalstory.pdf

download.microsoft.com/documents/australia/education/photo_story_3.pdf

http://digitalstorytelling.coe.uh.edu/getting_started.html

http://digitalstorytelling.coe.uh.edu/photostory.html

http://digital-stories.wikispaces.com/01+Powerpoint+into+Photostory

APPENDIX C
ACES FRAMEWORK RUBRIC

	0	1	2	3
Individualized Aging	Demonstrates no components of the following key concepts: • Assessment of function • Assessment of cognitive function • Atypical presentation of pain and management of pain • Assessment of geriatric syndromes • Assessment of sexuality Assessment of violence and elder mistreatment	Demonstrates 1-2 components of the following key concepts: • Assessment of function • Assessment of cognitive function • Atypical presentation of pain and management of pain • Assessment of geriatric syndromes • Assessment of sexuality • Assessment of violence and elder mistreatment	Demonstrates 3-5 components of the following key concepts: • Assessment of function • Assessment of cognitive function • Atypical presentation of pain and management of pain • Assessment of geriatric syndromes • Assessment of sexuality • Assessment of violence and elder mistreatment	Demonstrates > 5 components of the following key concepts: • Assessment of function • Assessment of cognitive function • Atypical presentation of pain and management of pain • Assessment of geriatric syndromes • Assessment of sexuality • Assessment of violence and elder mistreatment
Complexity of Care	Demonstrates no components of the following key concepts: • Geriatric syndromes • Oral hydration • Infection • Poly-pharmacy • Depression • Dementia Acute vs. chronic disease process	Demonstrates 1-2 components of the following key concepts: • Geriatric syndromes • Oral hydration • Infection • Poly-pharmacy • Depression • Dementia • Acute vs. chronic disease process	Demonstrates 3-5 components of the following key concepts: • Geriatric syndromes • Oral hydration • Infection • Poly-pharmacy • Depression • Dementia • Acute vs. chronic disease process	Demonstrates >5 components of the following key concepts: • Geriatric syndromes • Oral hydration • Infection • Poly-pharmacy • Depression • Dementia • Acute vs. chronic disease process
Vulnerabilities During Life Transitions	Demonstrates no components of the following key concepts: • Health care decision making • Palliative care • Iatrogenesis • Frailty • Advocacy Environment of care	Demonstrates 1-2 components of the following key concepts: • Health care decision making • Palliative care • Iatrogenesis • Frailty • Advocacy • Environment of care	Demonstrates 3-5 components of the following key concepts: • Health care decision making • Palliative care • Iatrogenesis • Frailty • Advocacy Environment of care	Demonstrates >5 components of the following key concepts: • Health care decision making • Palliative care • Iatrogenesis • Frailty • Advocacy Environment of care

	Defining Characteristics
ACES Knowledge Domains	

Individualized aging	Assessment of function
	• Activities of daily living
	    o Bathing, eating, dressing, hygiene, transferring, mobility, toileting
	• Independent activities of daily living
	    o Housekeeping, cooking, laundry, shopping, finances , transportation
	• Age related changes
	    o Physiologic changes by system
	• Nutrition
	    o Weight, BMI, labs, 24 hour dietary intake, supplements/calorie intake, mealtime difficulties, oral health
	• Sensory changes
	    o Loss, deprivation, aides, assistive devices, balance and movement.
	Assessment of cognitive function
	• Executive function, short term memory impairment, long term memory impairment, orientation, sequencing, adaptive capabilities, apathy, mild cognitive impairment, onset of symptoms, impact on functioning
	• Learning needs
	    o Cognition, language, style
	• Substance misuse
	    o Prescription and non-prescription medications, recreational drugs, alcohol use, tobacco use
	Atypical presentation of pain and management of pain
	• Knowledge of pain, use of pharmacologic and non-pharmacologic agents
	Assessment of geriatric syndromes
	• Sleep Disorders, Problems with Eating or Feeding, Pain, Incontinence, Confusion, Evidence of Falls, Skin Breakdown
	Assessment of sexuality
	• Influence of medications, normality, desire and mechanics, intimacy, sexually transmitted infections, orientation
	Assessment of violence and elder mistreatment
	• Abuse and neglect
	    o Physical
	    o Psychological
	    o Financial
	    o Verbal

Complexity of Care	Geriatric syndromes • Presence of Sleep Disorders, Problems with Eating or Feeding, Pain, Incontinence, Confusion, Evidence of Falls, Skin Breakdown Hydration status • Dehydration • Constipation • Medication toxicity • Fluid overload/CHF Infection • Increased risk • Atypical presentation Poly-pharmacy • Medication reconciliation

	• Financial implications
	Depression
	     • Lethality assessment
	     • Social isolation
	     • Treatment
	     • Atypical presentation
	Dementia
	     • Types
	     • Behavioral concerns
	     • Treatment
	     • Client/family education
	     • Caregiver burden
	Acute vs. chronic disease process
	Identify differences

Vulnerabilities During Life Transitions	Health care decision making
	     • HIPPA
	     • Patient wishes and expectations
	     • Family's wishes and expectations
	     • Belief systems/religion/spiritual
	     • Culture considerations
	         o generational, ethnic, racial considerations
	     • Advance directives
	     • Risks and benefits of expectations
	Palliative care
	     • Hospice
	     • End of life decisions
	Iatrogenesis
	     • Cascade disease pattern
	Frailty
	     • Needs assistance with ADLs
	     • Dependent on others for care
	     • Generalized weakness
	     • Weight loss
	Advocacy
	     • Who and how
	Environment of care
	     • Family/caregiver's role
	     • Legal/ethical considerations
	     • Resources
	         o Access to care
	         o Financial
	     • Safety
	Interdisciplinary collaborative care

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BIOGRAPHICAL SKETCH

Kellie Bassell graduated in 1983 from Boston College where she earned her BSN. She earned her MSN in 2004 from Florida Atlantic University and received her Ed.S. from the University of Florida in 2009. She received her Doctor of Education from the University of Florida in the summer of 2013.

Kellie has worked at Palm Beach State College in Lake Worth, FL since 2002, in the Registered Nursing program. Currently, she is the Director of Nursing. Previously, she was Department Chair of the Nursing program from 2007-2008 and Interim Program Director for Nursing, from January 2008-August 2008. One of her responsibilities has been to develop the nursing courses into multiple formats including web component, web hybrid and online. From 2005-2008, she taught Medical/Surgical Nursing (both didactic and clinical), Human Growth and Development in the online format; (a course she developed), and lecture and clinical to 1st semester Fundamentals students, in the evening/weekend program in a hybrid format.

Kellie's areas of interest and expertise include integrating educational technology into nursing education across the curriculum, academic nursing leadership and healthcare needs of the older adult.