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Humanities in Physical Therapy Education: A Case Study of Successful Curricular Integration

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HUMANITIES IN PHYSICAL THERAPY EDUCATION: A CASE STUDY OF
SUCCESSFUL CURRICULAR INTEGRATION

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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Indiana University of Pennsylvania

May 2018

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The purpose of this study was to examine the use of humanities in a physical therapy program committed to and successful with integrating the humanities into its curriculum.

Research questions sought to explore methods and content areas in which humanities were being integrated, attitudes and perceptions of faculty and students regarding the value of humanities, assessment and expected outcomes of humanities integration, supportive departmental and institutional factors, and challenges to successful curricular integration of humanities. This research used a qualitative single case study approach.

The study found that humanities-related activities were integrated into all major content areas. Narrative reflection, guest speakers, experiential learning, film, literature, fine arts, and publication of an online humanities-based journal were the primary methods by which the program incorporates humanities. Pedagogical approaches included repeated exposure, being explicit about the benefits of humanities, making activities relevant, keeping it simple, and being sensitive to time constraints. Perceived benefits and outcomes included attention to patient-centered care, development of soft skills, development of reflective abilities, formation of professional identity, cultivation of well-rounded clinicians, and creation of transformative experiences. Assessment was primarily through analysis of narrative writing using the Gibbs Reflective Cycle. All subjects agreed that long-term studies are needed to show the true impact of humanities on clinical practice.

Identified support for humanities integration included institutional commitment to its liberal arts tradition, campus culture and atmosphere, resources, and interdisciplinary collaboration. At the departmental level, faculty and student selection, program director support, and faculty mentors were all identified as important. Challenges to humanity integration were identified as lack of faculty and student buy-in, limited faculty knowledge regarding use of humanities, student stress and time constraints, limited room in the curriculum, and devaluing of the humanities by the physical therapy profession.

This study raises awareness and understanding of humanities integration in physical therapy education and serves as a model for other physical therapy programs looking to increase humanities presence in their curriculum.

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CHAPTER I

INTRODUCTION

The last two decades have brought marked change to the profession of physical therapy, creating increased need for physical therapy curricular approaches to be reexamined (Rapport, Stelzner, & Rodriguez, 2007; Sullivan et al, 2011). When the first Doctor of Physical Therapy (DPT) programs began in the late 1990s, replacing master's level degrees, higher expectations were placed on the level and scope of physical therapy practice (Grignon, Henley, Lee, Abentroth, & Jette, 2014). The new demands of the DPT degree dictated that it was not enough to learn basic evaluative and treatment skills; students of physical therapy were expected to develop the ethical and moral duties which accompany professional responsibility (Sullivan et al, 2011).

As part of the transition to the DPT, the American Physical Therapy Association (APTA) identified seven core values of physical therapy, including altruism, excellence, caring, ethics, respect, communication, and accountability, in order to define and foster professionalism (APTA, 2009; Hayward & Blackmer, 2010). To cultivate the core values in physical therapy education, increased focus was placed on development of the affective components of learning. Physical therapy education programs were challenged with finding ways to address professional behaviors in the curriculum, but faculty did not know the best pedagogical methods of accomplishing this task (Anderson & Irwin, 2013; Sellheim, 2003).

Around the same time that programs were transitioning to the doctoral level, the profession began to embrace “evidence-based practice,” a type of clinical decision making that involves evidence-based knowledge, clinical expertise, and patient values (Cormack, 2002). Although it is only one of the three components of evidence-based practice, evidence-based

knowledge and a positivistic approach began to dominate healthcare curriculum (Lazenby, 2012). According to Murray (2003), “Most educational programs emphasize knowledge, clinical skill, and competence, and although educators wish the person to be humanistic, empathetic, and communicative, they make take this aspect for granted...”

The American health care system has also evolved in the years since the transition from the MPT to DPT degree. Economic restructuring, globalization, and development of technologies have created many challenges for health care professionals (Savickiene, 2010). New demands have been placed on practitioners to deliver services in an efficient, effective manner (Anderson & Irwin, 2013). Health care has become more procedure-oriented and driven by specialization (Dellasega, Milone-Nuzzo, Curci, Ballard, & Kirch, 2007). Technology has given rise to products and procedures whose use can be helpful or harmful (Gore, 2013). Sociopolitical changes have impacted the way in which healthcare services are delivered (Sullivan et al., 2011). And finally, there has been a shift in the culture of medicine towards practitioners being more aware of patient belief systems and the need for advocacy (Threlkeld, Jensen, & Royeen, 1999). As a result, health care practitioners must be prepared to navigate a complex health care system through knowledge, technical skills, and professionalism, all of which are largely dependent on a well-designed education.

Fundamentally, there has been a shift in United States higher education over the last century from its liberal arts roots to an emphasis on skill-based learning (Zakaria, 2015). A century ago, college was a place where students went to broaden their minds and was not centered on training for a particular career (Colby, Ehrlich, Sullivan, & Dolle, 2011; Delbanco, 2012). Coursework was heavily steeped in the humanities, including philosophy, literature, fine arts, history, and language. College had three main purposes: to develop students at the personal

level, to prepare students to contribute productively to the economy, and to develop civic mindfulness (Ferrero, 2011). With the adoption of the university model, a higher value was placed on specialization and research than on having a broad knowledge base (Delbanco, 2012). Economically, there also has been a push to study only classes with a direct link to one's vocation (McKie, 2012). Universities have increased the amount of coursework needed to learn skills and trades with a direct application to intended employment. As science and technology have grown in depth of information, educators have struggled to find a way to cover all content areas, often sacrificing humanities coursework for classes which expand students' direct knowledge of the skills and content needed for their profession. Evidence-based practice, a standard of many healthcare fields, has created increased emphasis on the value of proven facts (Cormack, 2002). As a result, general education and the humanities in particular have come under fire as being unnecessary (Sullivan, 2010).

Humanities may have new life, however, as recent literature has highlighted the importance of the humanities for professional development, suggesting that the study of skilled professions is complementary to and enhanced by the humanities (Bumgarner, Spies, Asbill, & Prince, 2007; Colby, 2011; Moreno-Leguizamon, Patterson, & Rivadeneira, 2015; Sullivan & Rosin, 2008b). Humanities have been identified as an effective pedagogical tool for exposing students to diverse human experiences in order to develop better understanding as well as a holistic, empathetic, and sensitive patient-centered approach (Hagerty & Early, 1993; Johnson & Jackson, 2005; Smith, Molineux, Rowe, & Larkinson, 2006; Mañago & Gisbert, 2017). Medical schools have increased the emphasis on humanities coursework in both undergraduate and graduate phases of schooling for several decades, and many nursing schools have followed their lead (Donohoe & Danielson, 2004; McKie, 2012). The Carnegie Foundation for the

Advancement of Teaching has documented how humanities courses can develop important professional skills that discipline specific coursework alone could not in the fields of law, medicine, business, and engineering (Sullivan & Rosin, 2008b). However, little can be found in the literature supporting the specific use of humanities in physical therapy education.

Like many other health professions, physical therapy curricula has been dominated by physical and social sciences (Johnson & Jackson, 2005). Among many in physical therapy education, there has been a call for change with a renewed emphasis on developing the affective attributes expected of physical therapists which exemplify professionalism (Foord-May & May, 2007; Hayward & Blackmer, 2010). Increased expectations of and demands on the profession of physical therapy have created need for new educational approaches (Foord-May & May, 2007). In 2016, the Consortium of Humanities, Ethics, and Professionalism (CHEP), a division of American Council of Academic Physical Therapy (ACAPT), was formed to address curricular development in these areas (ACAPT, n.d.), but much work still needs to be done to identify and advance effective strategies.

Students of physical therapy are beginning a lifelong process of developing the ability to be “attentive, mindful, and non-judgmental” when working with their patients (Furze et al., 2015). They must be able to “monitor self, bring different perspectives, self-reflect, and see the context of the problem” (Furze et al., 2015). Physical therapy students are expected to develop qualities such as professionalism, empathy, moral reasoning, critical thinking, clinical reasoning, interpersonal, and improvisational skills (APTA, 2009; Shepard, Jensen, & Hislop, 1990). Humanities are suggested as a tool to develop professional behaviors in physical therapy students (Mañago & Gisbert, 2017). Physical therapy education programs must consider following the

example of medical and nursing education by integrating humanities into the curriculum as an effective way to develop the attributes and values of professionals.

Statement of Problem

In physical therapy education, there is a continual challenge to cultivate students' professionalism, attitudes, and values, in order to meet the demands and expectations of the profession (Hayward & Blackmer, 2010). The question frequently is raised regarding how faculty can better facilitate the development of professional attributes in physical therapy students (Anderson & Irwin, 2013; Hayward & Blackmer, 2010). Humanities, used frequently in medical and nursing curricula, are considered to be a tool whose integration helps to reinforce desired values and behaviors in professional students (Darbyshire, 1994; Donohoe & Danielson, 2004; Johnson & Jackson, 2005; Lazenby, 2012; McKie, 2012). However, little is known about the use or effectiveness of integrating humanities in physical therapy education. As a result, physical therapy educators are potentially missing opportunities for development of core values and professional behaviors through the humanities.

Purpose of Study

The purpose of this qualitative case study is to examine the use of humanities in a physical therapy program which is committed to and has had success with integrating the humanities into its curriculum. This study will raise awareness and understanding of humanities integration in physical therapy education and serve as a model for other physical therapy programs looking to increase humanities presence in their curriculum.

Research Questions

1. By which methods and in what content areas are the humanities being integrated into the physical therapy curriculum?

2. What are the attitudes and perceptions of faculty and students regarding the value of the humanities?
3. What are the expected outcomes of integration of the humanities and how are they assessed?
4. What departmental and institutional factors are present which support the integration of humanities into the curriculum?
5. What are the challenges to successful integration of humanities in the curriculum?

Significance of Study

The literature suggests a role for the use of humanities in physical therapy curricula to help cultivate professionalism in students (Bumgarner et al., 2007; Fins, Pohl, & Doukas, 2013; Sullivan & Rosin, 2008b). By examining a physical therapy program which has embraced integration of humanities, awareness can be raised regarding methods and effectiveness of humanities as a pedagogical tool. The results of this study may provide other physical therapy programs with a model of successful integration of humanities into curricula.

Research Design

This research used a qualitative single case study approach to examine a physical therapy program which is currently integrating humanities into its curriculum. A qualitative approach is better suited to explore a topic on which there is limited preexisting research and whose variables are difficult to measure (Creswell, 2013). In order to understand how the physical therapy program in this study effectively integrates humanities, a case study approach was determined to be the most appropriate method of providing an in-depth look at the program through multiple sources of data. One single physical therapy program was chosen for this study in order to examine the curriculum, program, and institution from multiple perspectives.

Theoretical Perspectives

The theoretical perspectives presented are aimed at understanding why some pedagogical tools may be more effective than others for reaching the affective domain of learning in physical therapy education. Because physical therapy students are transitioning into adult learners, educational theory addressing the unique ways in which adults learn were explored. Taylor and Hamdy (2013) suggested that “adult learning theories should influence all aspects of health profession education, from mission and vision statements, outcomes, implementation and evaluation.” Malcolm Knowles (1975) wrote extensively about adult learning, termed “andragogy,” explaining that adult learners have a psychological need to be self-directed in their learning, recognizing that learning and meaning are based on individual experiences.

Transformative learning, described by Jack Mezirow (1990) and reflective of adult learning theory, provides a framework for the effectiveness of the humanities in physical therapy education. Transformative learning is based on constructivism, asserting that individuals find meaning based on their own experiences; as a result, there are multiple realities formed in every situation by each individual. Mezirow suggests that these realities become deeply ingrained and can only be changed by an experience in which one’s reality is challenged. When a challenge occurs, termed a “disorienting dilemma”, it causes the learner to reconsider what they believe to be true and potentially revise their beliefs and values (Mezirow, 1990). The humanities are suggested to be tools which potentially create transformative experiences for healthcare students (Doukas et al., 2013; Snyder, 2012).

The work of Donald Schön (1987) on reflection will also help to build the framework for this dissertation. Schön proposed a new approach to professional education in his book *The Reflective Practitioner*, in which he argued that the types of problems professionals must solve

require “practical knowledge”, an attribute which he distinguishes from declarative knowledge (Schön, 1987). Declarative knowledge describes the skills and facts which professionals must know to perform their job, while practical knowledge describes the knowledge of knowing how to do one’s job. According to Schön, practical knowledge can be gained through metacognitive skills and reflection, both of which can be linked to humanities use in education (Schön, 1987).

Finally, the importance of an integrated curricular approach will be considered. Despite many physical therapy students completing humanities based coursework in their undergraduate years, it is suggested that humanities must be integrated directly into physical therapy coursework to have meaning in professional development (Case, 1991). Humanities integrated into medical coursework provides context to the learner and create a situation in which biases and pre-conceived notions are challenged (Shapiro, Nixon, Wear, & Doukas, 2015). Sullivan (2004) echoes the importance of creating context in the educational preparation of professionals to prepare them for real world situations. Humanities may provide a way to bring context into the classroom setting.

Assumptions and Limitations

For this study, it is assumed that all participants will understand what is meant by the term humanities, with clarification being provided as needed. It is also assumed that literature discussing liberal arts in higher education is reflective of humanities, as they are a major component of traditional liberal arts. Limitations include the lack of generalizability of a single case study, understanding that a university is a complex system with many factors unique to itself. There is also concern with the fact that much of the research is dependent on self-reported data; thus, biases will be inherent in responses. The researcher also may bring biases to the reporting based on personal feelings towards the use of humanities in physical therapy education.

Another possible limitation is the lack of existing literature on the use of humanities in physical therapy education on which to base current research. Finally, there is a concern of small sample size affecting generalizability of results.

Definition of Terms

Clinical Reasoning: A term often used as a pedagogical goal of medical and healthcare education. A distinction between clinical reasoning and critical thinking has been made in the literature although the terms are often used interchangeably. Critical thinking is explained as using “inquiry and cognitive skills” to identify problems, find solutions, and incorporate evidence (Babyar, Pivko, & Rosen, 2010). Clinical reasoning is described as not just the mental processes but the connections between the mental processes and behaviors of the patient, practitioner, and environment, using critical thinking in the context of the health professions (Furze et al., 2015).

Commission on Accreditation of Physical Therapy Education (CAPTE): An accrediting agency for physical therapy programs that is nationally recognized by the US Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA) (Kissal, n.d.).

Humanities: Refers to the study of disciplines such as philosophy, literature, fine arts, history, and language. According to Evans (2002), humanities include those classes which focus on “experience of the world and of ourselves within it, experience in all its varieties and within all the diverse models of reality underlying different cultural, linguistic, spiritual and theological traditions.”

Liberal Arts: Includes but is not limited to courses in English composition and literature, fine arts, foreign language, government, economics, sociology, psychology, mathematics and

science. Combined, the coursework provides broad perspective on social and human conditions (Ambrosino, 2016).

Medical Humanities: “Methods, concepts, and content from one or more of the humanities disciplines to investigate illness, pain, disability, suffering, healing, therapeutic relationships, and other aspects of medicine and health care practice...[used] with the intention of becoming more self-aware and humane practitioners” (Shapiro et al. 2009).

Professionalism: “The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (Epstein & Hundert, 2002).

Professional Formation: Moral and professional development and identity (Rabow, Remen, Parmalee, & Inul, 2010).

Professional Behaviors: A set of ten behaviors widely adopted by United States physical therapy education programs to describe expected growth areas in students. The ten behaviors include commitment to learning, interpersonal skills, communication skills, effective use of time and resources, use of constructive feedback, problem solving, professionalism, responsibility, critical thinking, and stress management (Jette & Portney, 2003).

Values: Standards that guide decisions and influence behaviors, actions, and attitudes (Greenfield et al., 2015).

Summary

Professional behaviors are a focus of physical therapy education whose importance have become greater than ever due to both the elevation of the profession to a doctoral degree and the complexities of the healthcare system and society in modern times (Anderson & Irwin, 2013). There is limited consensus on effective pedagogical strategy for the development of

professionalism in physical therapy education (Hayward & Blackmer, 2010). Literature from medical and nursing schools has identified the humanities as an effective tool for developing professional behaviors in students, but little can be found in the literature regarding physical therapy's adoption of the humanities in education.

Chapter II examines the profession of physical therapy and the changes over time which have created the need for new curricular approaches to address the affective domain of learning. The history of humanities' role in higher education will be explored, followed by current uses and benefits of humanities in professional education. Finally, theoretical models will be presented which help to explain why humanities may play an important role in professional education.

CHAPTER II

REVIEW OF RELATED LITERATURE

Changes to degree requirements and expectations in physical therapy in the last twenty years have created new challenges for educators (American Physical Therapy Association, 2011; Commission on Accreditation in Physical Therapy Education, 2014; Grignon et al., 2014; Hall, Brajtman, Weaver, Grassau, & Varpio, 2014; Rapport et al., 2007). Student physical therapists must develop not only the increasingly complex skills and knowledge needed for the job, but also the behaviors which define a professional. However, there is a lack of agreement on the most effective pedagogical approaches to cultivate the values and behaviors expected of physical therapy students (Hayward & Blackmer, 2010). Numerous examples can be found in the literature supporting the integration of humanities in coursework to develop the target behaviors, attitudes, and values of medical and health professionals (Boudreau & Fuks, 2015; Fins et al., 2013; Liao, 2017; Moreno-Leguizamon et al., 2015; Moyle, Barnard, & Turner, 1995; Newell, 1989). However, little is known about how physical therapy education programs use or perceive the humanities.

This chapter will examine the evolution of the physical therapy degree and resultant current curricular needs, the history of the humanities in higher education, and the benefits and challenges of integrating humanities into professional curriculum. The chapter will conclude with discussion of theory focused on Mezirow's transformational learning, Schön's reflection-in-action, and integrated curriculum, all of which may help to explain the beneficial relationship between humanities and health professions.

Physical Therapy

In order to understand the benefit of integration of the humanities into physical therapy education, one must consider the significant growth and change in the profession since its birth nearly a century ago. This section will examine the historical perspective of the development of the profession, current curricular and professional demands in physical therapy education, and challenges faced by physical therapy educators.

Historical Perspective

Described by Plack and Wong (2002), the profession of physical therapy began in the United States in the early twentieth century concurrent with the poliomyelitis epidemics of 1914 and 1916. As the number of citizens with physical disabilities significantly increased, Boston orthopedic surgeon Robert Lovett began teaching methods of providing therapeutic rehabilitation to patients with weakness and paralysis (Plack & Wong, 2002). At the same time, soldiers were returning from World War I with numerous physical injuries, spurring the Army to hire people to help veterans return to function. Termed “reconstruction aides,” women completed three-month training programs to assist soldiers with rehabilitation (Moffat, 1996; Scully & Barnes, 1989). Similar certificate-based programs began to be offered in hospitals, focusing on the acquisition of technical skills (Plack & Wong, 2002). In response to the rapid growth of the field, the American Women’s Physiotherapy Association (AWPA) was formed in 1921, later becoming the American Physiotherapy Association (APA) in 1922, and finally the American Physical Therapy Association (APTA) in the late 1940s (American Physical Therapy Association, 2011; Neil, n.d.). In 1928, the APA successfully worked to raise the standard for physical therapy education from a three month to a nine-month certificate program (Plack & Wong, 2002).

In the 1930s and 1940s, legislation increasing services for Americans with disabilities, as well as injuries sustained by World War II veterans, created significant demand for and subsequent growth in the field of physical therapy (APTA, 2011). As the field began to expand, the American Medical Association, by request of the APA, began accrediting physical therapy schools in 1936 (Moffat, 1996). Concurrently, the standard for admission into physical therapy programs was increased to degree completion from a two-year college or the credit equivalent, and the length of time to complete a physical therapist certification program was increased to 12-24 months (Plack & Wong, 2002).

Physical therapy continued to develop as a profession throughout the mid-twentieth century, spurred by a new polio epidemic, injuries to Korean War veterans, and significant growth of the elderly population (APTA, 2011; Moffat, 1996). Major advancements in medical technology such as artificial joint replacements and heart transplants increased skill and responsibility demands on physical therapists due to the increased complexity of care (Moffat, 1996). In 1960, the APTA House of Delegates passed a resolution to increase physical therapy education to a four-year baccalaureate degree in order to make training more comprehensive. A subsequent resolution was passed in 1979 to increase the minimum educational requirements to a master's degree by 1990, but was later abandoned due to strong opposition. The APTA House of Delegates finally voted to approve a mandatory entry-level Master's degree in 1999 (Plack & Wong, 2002).

As the profession continued to develop, leaders within the field recognized the need to elevate the standard degree to the doctoral level in order to prepare students to practice with more autonomy in an increasingly complex health care system (Rothstein, 1998; Threlkeld et al., 1999). In 1993, the first entry-level Doctor of Physical Therapy (DPT) program was launched at

Creighton University in Nebraska. The new degree was met with controversy by people within and outside of the profession (Bollag, 2007; Plack & Wong, 2002). Proponents argued that the degree would help to cultivate leadership, research commitment, and social responsibility (Bollag, 2007; Rothstein, 1998). The DPT also was proposed to increase respect and bargaining power, encouraging physical therapists to be treated as true professionals (Plack & Wong, 2002). From an educational perspective, it was argued that the credit workload being completed to earn a master's degree in physical therapy was similar to what was earning a clinical doctorate in other professions (Rothstein, 1998). Opponents of the DPT cited concerns over perceived degree inflation, lack of evidence for the need for the degree change, and increased educational costs to students relative to the salary of a physical therapist (Bollag, 2007; Mandich, 1999; Messaros, 1999; Plack & Wong, 2002). Despite the opposition, a steady stream of physical therapy educational programs began to adopt the DPT in the first decade of the century.

Effective in January 2016, the DPT became the required degree for all entry-level physical therapist education programs (APTA, 2011). Currently there are 242 accredited DPT programs in the United States (CAPTE, 2018). Programs typically are completed in an accelerated 3+3 format, meaning three years of undergraduate studies followed by three years of graduate education, or a 4+3 format, with students completing three years of graduate school after a baccalaureate degree in any field is obtained, as long as prerequisite coursework has been completed (CAPTE, 2014). According to the APTA, 80 percent of DPT curriculum is comprised of didactic work and the remaining 20 percent is comprised of clinical education in the field (APTA, 2011). The elevation of the degree to a doctoral level created new demands on educators to revise curricula to meet new professional expectations (Rapport et al., 2007).

Curricular and Professional Demands of the DPT Degree

Physical therapy has evolved from being a skill-based job requiring certification to a profession requiring a doctoral degree, creating new expectations and challenges for physical therapy education programs (Hayward & Blackmer, 2010). In addition to gaining knowledge and skills, physical therapy students also must develop behaviors expected at a doctoral level of education, becoming autonomous practitioners who demonstrate high levels of professionalism and competency (APTA, 2011). Physical therapy educators therefore need to identify and incorporate effective ways of cultivating in students the attitudes and values expected of professionals (Jette & Portney, 2003; Sellheim, 2003). Traditional curricula may not be adapted to address the complex moral and ethical issues of today's world (Jones et al., 2016). Although most physical therapy faculty identify development of attributes such as clinical and moral reasoning as educational objectives, there is little knowledge of or agreement on the best pedagogical approaches to accomplish this goal (Furze et al., 2015; Sellheim, 2003; Swisher, Kessel, Jones, Beckstead, & Edwards, 2012). Furthermore, there are not uniform guidelines for expected outcomes for physical therapy graduates as outcomes are supposed to reflect the mission of each individual program, creating potential variance across programs in focus on student behaviors (Grignon, Henley, Lee, Abentroth, and Jette, 2014).

Grignon, et al. (2014) performed a qualitative analysis of expected outcomes of physical therapist education programs across the United States. Analyzing the documents of seventy-five participating programs, the researchers identified ten common themes which emerged as target outcomes of physical therapy education: service and social responsibility, professionalism, professional role, professional commitment, practice management, communication, professional growth and development, evidence-based practice, clinical reasoning, and patient management.

Many of the ten identified themes reflect the target attributes found in APTA documents including the *Code of Ethics, Standards of Practice in Physical Therapy, Professionalism in Physical Therapy, Core Values, and The Normative Model for Physical Therapist Education* (Grignon et al., 2014).

The Normative Model of Physical Therapist Professional Education: Version 2004 (APTA, 2004) is a consensus-based guide establishing universal expectations for content of physical therapy programs. The purpose of the *Normative Model* is to direct physical therapy education in a manner that “is reflective of a contemporary and forward- looking perspective of practice, is responsive to physical therapy practice and the health care environment, and that incorporates the elements for the profession’s vision” (APTA, 2004). This document defines expectations of entry-level physical therapists and ensures consistency across programs.

According to the *Normative Model* (APTA, 2004):

The mission of physical therapist professional education is to graduate knowledgeable, service-oriented, self-assured, adaptable, reflective practitioners who, by virtue of critical and integrative thinking, lifelong learning, and ethical values, render independent judgments concerning patient/client needs that are supported by evidence; promote the health of the client; and enhance the professional, contextual, and collaborative foundations for practice. These practitioners contribute to society and the profession through practice, teaching, administration, and the discovery and application of new knowledge about physical therapy. This education is achieved through structured and varied experiences of sufficient excellence and breadth to allow the acquisition and application of essential knowledge, skills, and behaviors as applied to the practice of physical therapy. (p. 9)

All physical therapy schools are required to follow the Normative Model as criteria for meeting accreditation standards (CAPTE, 2014), but there is significant flexibility in the methods which can be used to address the criteria. There are also loose curricular guidelines for preparatory coursework that should be completed prior to admission to a DPT program, giving students a solid foundation from which to build in physical therapy school. According to the CAPTE evaluative criteria handbook (CAPTE, 2014), there is:

an expectation that students enter the professional program with a balance of coursework in humanities, social sciences, and natural sciences that is appropriate in breadth and depth to develop the ability of students to think independently, demonstrate problem solving techniques for solving simple and complex problems, weigh values and set priorities, understand fundamental theory, exhibit responsible social behavior, demonstrate professional collegiality and good citizenship, and communicate effectively both orally and writing. (p. 25)

Despite the CAPTE recommendations, a survey of 2017-2018 prerequisite requirements reported on the Physical Therapy Centralized Application System (PTCAS) website, which includes 223 of the 242 accredited US DPT programs, shows that only 2% (n=5) have a humanities requirement, 2% (n=4) have an ethics requirement, and 19% (n=43) have a writing or composition requirement (PTCAS, n.d.). Physical therapy students are potentially entering into the professional phase of education with minimal exposure to humanities.

In order to provide a clear, unified direction for the future of the physical therapy profession, in 2000 the APTA House of Delegates adopted “Vision 2020” as well as the “Strategic Plan for Transitioning to a Doctoring Profession” (APTA, 2011). A significant point of the strategic plan was that “professionalism” needed to be defined and described. A committee

of physical therapists selected for their expertise convened to identify a set of values which reflected professionalism. As a result of the committee work, the “Core Values” were adopted in 2003 (APTA, 2004). The seven core values identified were accountability, altruism, compassion/caring, excellence, integrity, professional duty, and social responsibility (APTA, 2004).

The Normative Model includes the core values of physical therapy as an educational expectation but does not address pedagogy or assessment strategies to ensure effective cultivation of these attributes. Recognizing the need to evaluate professional growth in students, physical therapy educators at the University of Wisconsin-Madison created the “Generic Abilities Form” in 1995, which was revised in 2010 and renamed the “Professional Behaviors Assessment” (May, Kontney, & Ingarsh, 2010). This document, adopted by physical therapy programs throughout the United States, serves as rubric on which students self-assess their professional behaviors. The form asks students to self-rate on the following categories: critical thinking, communication, problem solving, interpersonal skills, responsibility, professionalism, use of constructive feedback, effective use of time and resources, stress management, and commitment to learning. Although the assessment is valuable in helping students to reflect on their development of professional attributes, debate exists regarding the best pedagogical strategies for teaching and assessing its items (Hayward & Blackmer, 2010).

One of the most significant factors impacting physical therapy education has been the push for evidence-based practice (Cormack, 2002). Physical therapy has traditionally been both an art and a science, as exemplified by the APTA’s 2001 slogan, “The Science of Healing; The Art of Caring” (Beaumont, 2001). However, around the same the slogan was used in marketing, the profession began to embrace a shift towards evidence-based practice (Cormack, 2002). In

June 2003, the World Confederation for Physical Therapy (WCPT) adopted a policy statement on evidence-based practice, stating, “Physical therapists have a responsibility to ensure management of patients, carers, and communities based on the best available evidence. They also have a responsibility not to use techniques and technologies that have been shown to be ineffective or unsafe” (World Confederation for Physical Therapy, 2017). The focus on evidence-based practice subsequently increased significantly in physical therapy curricula (Manns, Norton, & Darrah, 2015; Tilson et al., 2011). Physical therapists, similarly to other health professionals, began to move towards using only evaluative techniques and interventions that were proven to be effective (Lazenby, 2012).

However, there is a second part of the WCPT’s statement that also must be considered in physical therapy education, which is that evidence should be “integrated with clinical experience, taking into consideration beliefs, values, and cultural context of local environment” (WCPT, 2017). “Evidence-based problem solving,” as described by Rielgelman (2012), integrates principles learned across liberal arts disciplines and is suggested to be important in the preparation of health professionals. Lazenby (2012) cautions against making decisions in healthcare purely from a positivistic view, suggesting that it creates practitioners who rely too much on scientific and not enough on humanistic knowledge. Lazenby stresses the importance of cultivating in health professionals the self-reflection skills and values needed to enhance decision making. Educators can impact humanistic values by giving attention to the affective domain of learning (Valiga, 2014).

Addressing the Affective Domain

The affective domain was described by educational psychologist Benjamin Bloom in 1956 (Bloom, Krathwohl, & Masia, 1986). Bloom’s taxonomy, commonly used as a framework

by educators, is a classification of educational objectives divided under three overarching categories: cognitive, psychomotor, and affective. The cognitive domain represents knowledge, while psychomotor represents skills obtained. The third domain, affective, captures the attitudes and values gained through the educational experience. Krathwohl, who co-authored the original taxonomy with Bloom, further developed the description of the affective domain in 1964 (Krathwohl, Bloom, & Masia, 1964). Krathwohl defined five stages of development of the affective domain, including (a) receives phenomena, (b) responds to phenomena, (c) values, (d) organizes, and (e) internalizes. As further described by Bohlin (1998) and Shepherd (2008), the first stage, *receives phenomena*, describes becoming aware of a new idea by listening, watching, reading, or participating in other activities in which one shows interest. The second stage, *responds to phenomena*, refers to the learner engaging in a topic by seeking it out or showing appreciation for it. The third stage, *valuing*, describes the point at which the learner becomes more involved with or committed to a new value. The fourth stage, *organization*, refers to the process through which a learner integrates their old and new values as a result of the educational experience. The final stage, *characterization or internalization*, represents the point where the learner consistently embraces and embodies a new value (Bohlin, 1998; Shepherd, 2008). The affective domain is important to address in physical therapy education as it reflects the cultivation of values and attitudes which are important in professional careers (Carter, 1985). However, there is uncertainty among educators as how to address or assess this domain (Carter, 1985; Doyle, Hungerford, & Cruickshank, 2014).

Development of the affective domain should be an important curricular goal of physical therapy education, recognizing that emotions and “habits of mind” are central to judgment, decision making, and competence (Epstein, 2002). To guide pedagogical approaches, work can

be found in the literature suggesting strategies to impact affective behaviors. Shepherd (2008) identifies that methods of reaching the affective domain in teaching may include:

discussion, open debate, peer involvement, role playing, problem-based learning, engaging with role models, simulations, games, group analysis of case studies, expert engagement, perspective sharing via reflection, appropriate use of multimedia to trigger responses – all provide the mainstay of learning activities in those areas of higher education where affective outcomes are sought and respected. (p.91)

Experiential learning, such as community service, is noted to impact the affective domain of learning (Shepherd, 2008), as do reflection and reflective writing (Boyd, Dooley, & Felton, 2006). According to Valiga (2014), affective learning occurs when students “a) think deeply and critically about what guides their actions and how they relate to others, b) reflect on their values, and c) make conscious decisions about the kind of individuals they want to be in this world” (p. 247). Effective use of methods aimed at the affective domain is dependent on educators’ familiarity and comfort, with assessment presenting an equal challenge (Schoenly, 1994).

While methods of assessing cognitive and psychomotor development have been well developed, significantly less attention has been given to the affective domain (Cruess, Cruess, & Steinert, 2016; Savickiene, 2010; Shephard, 2008). The lack of focus on the affective domain may be due to difficulty describing and assessing outcomes, as well as that in education, knowledge and skills are often seen as more important than attitudes and values (Carter, 1985; Savickiene, 2010). Course learning outcomes reflective of the affective domain are often minimal, and assessment of the attainment of such outcomes is complicated and of questionable reliability (Savickiene, 2010; Schoenly, 1994). Bohlin (1998) asserts that most tools only look at one or two attributes instead of capturing a more global picture of affective development. Doyle

et al. (2014) echo the difficulty of teaching, integrating, and assessing affective domain behaviors. Despite the challenges of developing the affective domain, it is important that educators increase their focus on its development to cultivate leaders and scholars (Valiga, 2014). According to Valiga (2014), “our educational systems must focus more on the development of values, so students from strong identities and learn to expect more from themselves.”

Challenges for Physical Therapy Educators

In her keynote address given at the 2011 APTA national conference, Gail Jensen, Dean of the Graduate School and College of Professional Studies and Professor of Physical Therapy at Creighton University, stated, “We have moved rapidly in our educational transformation and level of degree required for entry into practice, driven most recently by market forces, often with neither enough reflective thought nor enough evidence on which dimensions of professional education really matter” (Jensen, 2011). Despite the growth of the profession to a doctoral level, there is still a lack of consensus about how to develop and assess the attributes and values of professionalism in students (Hayward & Blackmer, 2010). In addition, cultivation of clinical reasoning, empathy, and moral reasoning are desired outcomes of physical therapy education without clear pedagogical strategies for successful attainment.

Professionalism. The development of professionalism is an important goal of physical therapy education, encompassing “standards for values, behaviors, and practice within a profession” (McGinnis, Guenther, & Wainwright, 2016). Epstein and Hundert (2002) define professionalism as “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served.” Colby and Sullivan (2008) describe professionalism as

“the field’s ethical standards and practices, professional sensibilities, appreciation for and commitment to the field’s essential social purposes, and sense of professional identity in which those purposes and standards are experienced as core features of what it means to practice that profession.” The development of student professional identity has been identified as an essential component of health profession education (McGinnis et al., 2016). Physical therapy educators recognize the importance of cultivating professional behaviors, but most find them very hard to define or to translate from the classroom to the clinic (Jette & Portney, 2003; McGinnis et al., 2016).

Carey and Ness (2001) suggest that an attitude of consumerism might be a barrier to development of professionalism in students. As the cost of obtaining a degree rises, students view education as a product to be purchased and can be critical of coursework not directly related to what they deem to be important. Curricular activities aimed at building professional behaviors are not as explicitly valuable to students as coursework which builds knowledge of the musculoskeletal and neurological systems, for instance. Physical therapy educators must help students to understand the meaning and responsibility of developing professional behaviors.

Clinical reasoning. Clinical reasoning, a component of professionalism, is an important goal of physical therapy education (Edwards et al., 2004; Gilliland, 2014). Clinical reasoning is an expansion of critical thinking, a concept which involves using inductive and deductive skills, evaluation, analysis, and inference to make well founded decisions (Brudvig, Dirkes, Dutta, & Rane, 2013; Huhn, Black, Jensen, & Deutsch, 2011). Built on critical thinking skills, clinical reasoning is specific to the point of view of the profession, using contextual information as well as reflection to make decisions (Furze et al., 2015; Huhn, Black, Jensen, & Deutsch, 2013). According to Furze et al. (2015), “Clinical reasoning is the learner’s integration of knowledge,

thinking, and skill application.” Several methods to improve clinical reasoning have been explored in the literature, including mind-mapping (Zipp, Maher, & D’Antoni, 2015), making thinking visible (Delany & Golding, 2014), reflective narrative (Greenfield et al., 2015), metacognition, and reflection (Constantinou & Kuys, 2012; Cutrer, Sullivan, & Fleming, 2013; Furze et al., 2015). However, a systematic review by Rochmawati and Wiechula (2010) examining the best strategies for developing clinical reasoning skills found that there was insufficient evidence to draw conclusions about which method was most effective.

Humanities integration in the form of narrative writing is proposed to help develop critical thinking and clinical reasoning skills in physical therapy students, largely due to the reflective component (Dunfee, Rindfleisch, Driscoll, Hollman, & Plack, 2008; Eisenhauer & O’Neil, 1995). However, in their research on the use of reflective narrative during clinical experiences in physical therapy education, Greenfield et al. (2015) found the majority of students did not possess the necessary skills to write a meaningful analytical reflection about their experiences, findings that echoed an earlier study by Wessel and Larin (2006). Furthermore, research on students’ perceptions of development of clinical reasoning suggested that students valued practice in a clinical setting over use of reflection as an effective pedagogical tool (Babyar et al., 2010; Hendrick, Bond, Duncan, & Hale, 2009). Despite the critical perspective of students, research by Wainwright, Shepard, Harman, and Stephens (2010) suggested that one of the biggest differences between novice and expert physical therapy practice is utilization of the skill of reflection. Reflective activities, often facilitated through humanities, can help students to use knowledge and skills in a way that moves beyond the purely technical (Shapiro, Coulehan, Wear, & Montello, 2009).

Empathy and moral reasoning. Empathy and moral reasoning are other important behavioral attributes that physical therapy educators work to develop in the classroom setting (Bayliss & Strunk, 2015; Carpenter, 2010). A study by Bayliss and Strunk (2015) found that empathy scores of physical therapy students actually decreased in their third year of education as compared to the first, a finding that echoes research in other healthcare disciplines (Chen, Lew, Hershman, & Orlander, 2007). Smith et al. (2006) claim that humanities integration in physical and occupational education helps to develop empathy, compassion, sensitivity, observational skills, and appreciation for the complexity of the human experience.

Humanities have been identified as a pedagogical tool to promote attributes such as professionalism, clinical reasoning, and empathy in medicine and nursing (Fins et al., 2013; Moyle et al., 1995; Murray, 2003; Shapiro et al., 2009). Smith et al. (2006) claim that humanities can develop the same attributes in physical therapy, but little is known regarding the current use of humanities in physical therapy education or the knowledge and understanding among physical therapy faculty regarding the role that humanities coursework can play in developing these skills. Traditionally physical therapy has been considered to be a caring field, which may have caused past assumptions that such overt addition of humanities was not necessary in curriculum (Dellasega et al., 2007). However, curricular demands created by changes to both the profession of physical therapy and the healthcare system make the need for new curricular approaches greater than ever (Hayward & Blackmer, 2010). The proposed benefits of integration of the humanities into professional curriculum can be better appreciated by examining the history and role of the humanities in higher education.

Humanities

Humanities have been a core component of higher education for centuries but have been the subject of significant scrutiny in recent decades in response to the rising cost of higher education as well as limited job opportunities (Lavery, 2015; Marcus, 2013; Martino, 2015; Musil, 2015). However, increased attention has been given recently to the role the humanities can play in professional education, bringing new life and purpose to use of humanities (Lazenby, 2012; McKie, 2012; Sullivan & Rosin, 2008b). This section will explore the evolution of the humanities in higher education, the integration of humanities in professional education, current uses of humanities in medical and health professions, and the benefits and challenges of successful humanities integration in curricula.

History of the Humanities in Higher Education

The first universities were founded in Greece approximately 2,500 years ago and evolved through the centuries throughout Europe (Zakaria, 2015). As described by Zakaria (2015), United States colleges, modeled after higher education institutions in England, were established in the 17th century, beginning with Harvard in 1636. Early American colleges had religious roots, and all students were expected to study scriptural texts within a humanities-based curriculum (Delbanco, 2012; Musil, 2015). Liberal learning was the focus of higher education, with all students taking a similar course of study aimed at the primary goal of broadening the mind. In his book *College: What It Was, Is, and Should Be*, Andrew Delbanco (2012) explains that the purpose of early universities was to create well-rounded individuals, not to point students towards a specific career path. If a student's intent was to be a physician or barrister, the specific trade would be learned through an apprenticeship after graduation. College was considered to be

an institution where character was developed, not a place where a skilled professional was trained (Delbanco, 2012; Liao, 2017).

Evolution of the United States Higher Education System

In the late 19th century, a shift towards specialized vocational schools occurred in American higher education. Colleges transformed into research universities with emphasis on courses which developed the skill sets needed for a specific job (Delbanco, 2012, p.77). In some higher education institutions, teaching knowledge and skill was prioritized above developing professional purpose and commitment, moral integrity, and ethical conduct (Colby & Sullivan, 2008). The traditional goals of higher education, including personal growth, civic awareness, and preparation towards a vocation or further study, were replaced by economic goals aimed at creating productive members of the workforce (Ferrero, 2011). Interest in fields such as business grew while the number of students majoring in humanities dropped (Zakaria, 2015, p. 16).

Higher education in America has continued to be impacted by trends which began more than a century ago. In recent years, enrollment at universities has grown by one third while enrollment at liberal arts colleges has remained roughly the same (DelBanco, 2012, p. 12). There has been a significant decline in both the number of humanities majors and the number of humanities offerings at colleges across the United States over the past forty years (Hearn & Belasco, 2015). Meanwhile, the explosion of knowledge in science has created a challenge for educators to teach an increased volume of information in the same number of credit hours (Dellasega et al., 2007). As a result, humanities credit requirements are often reduced to make room for other coursework (Dellasega et al., 2007). Although humanities have remained a core part of many college and universities' general education curriculum, their prominence has faded.

Current Attitudes Towards Humanities

Critics from academics to legislators question if humanities education still has relevance in today's world (Fish, 2008; Marcus, 2013). In today's market-driven universities, many students see their chosen course of study as an investment and expect institutions to be their ticket to successfully gaining employment (Weber, 2015). Coursework lacking an explicit connection to a career path seems impractical to some (Lavery, 2015). In addition, the rising cost of a college education coupled with increased awareness about mounting student debt has led to both students and public figures scrutinizing the value of liberal learning (McKie, 2012; Zakaria, 2015). As suggested by Martino (2015):

In a market context, the value of the humanities has been called into question of late, especially as the administrative and curricular paradigm for colleges and universities moves closer to a business model... The question becomes one of use-value pure and simple: a degree in the humanities has value only if it can be exchanged for steady employment. (p.27)

The relevance of humanities in higher education is questioned with increasing frequency. Although some may claim that humanities improve critical thinking skills, more evidence is needed to demonstrate the importance of humanities education in one's career (Sullivan & Rosin, 2008). According to Weber (2015), "There is no room in today's consumerist societies for the humanities, both in the sense that jobs in the humanities are very rare and that the critical perspective the humanities foster is not welcomed at all." When higher education is driven by economic forces, it is difficult to quantify the value of the humanities in order to demonstrate their worth (Belfiore, 2015). In addition, there tends to be latency regarding where and when the

impact of humanities education will be seen; therefore, the worth of the humanities might not be realized until years after one graduates (Fins et al., 2013).

Despite the critics who suggest humanities are no longer relevant in higher education, much has been written in recent years to increase awareness of the value of humanities in curriculum. Harward (2007) describes three main learner benefits of liberal education: *epistemic*, gaining knowledge, *eudemonic*, gaining self-awareness and development, and *civic*, relating and having responsibility to community. Elliot Eisner (1994), a leading academic in the late 20th century, coined the term “aesthetic thinking” to describe the rich development of the mind when including arts in curriculum. DelBanco (2012) states that college should be “an aid to reflection, a place and process whereby young people take stock of their talents and passions and begin to sort out their lives in a way that is true to themselves and responsible to others” (p. 15). According to Sullivan (2010), “the aim of a liberal education is to enable students to make sense of the world and their place in it, to prepare them to use knowledge and skills as a means towards responsible engagement with the life of their times” (p. 12). Humanities are seen as a way to develop the whole person, which in turn has a positive impact on career, personal well-being, and role in community.

Some argue that humanities in higher education can gain appreciation if they are made relevant by integrating them with other courses of study (Lata, P. & Devika, 2013; Sullivan, 2010). Sullivan (2010) suggests that a liberal education must be used not just to teach analytical skills, but to actually help students apply them to real world situations. By integrating humanities into the study of other subjects they gain meaning, providing context to skill-based learning (Darbyshire, 1994). Andrew Delbanco (2012) states that students need “to have their minds stretched by the big questions raised by history, science, philosophy, and the arts. By the same

token, students in traditional liberal arts need to gain the concrete skills required in a demanding labor market” (pp. xv-xvi). Martino (2015) expands this idea, stating:

If the United States is to compete with the rest of the world in education, then we must move beyond the mentality of education as only a means to a better job. We get the society we deserve, and, if we have a society filled with nothing more than skilled workers and middle-managers, then no one will be able to lead us into the future in meaningful and thought provoking ways. (p. 29)

Shulman (2011) makes the argument for “reciprocal integration,” stating that professional learning and liberal arts must be taught together to make each relevant to the other (p xi). According to Shulman, “There is nothing more professional than liberal education, properly construed; there is nothing more liberal than professional education, properly construed.” When humanities are integrated into professional education, context is created, improving students’ abilities to think for themselves (Shulman, 2011). Educators must recognize the potential benefits of infusing the humanities into professional education.

Humanities and Professions

In order to understand the proposed relationship between humanities and professions in context, one must reflect on changes to the way in which professionals are educated. A little more than a century ago, students received a broad based liberal education at college, then found an apprenticeship with an experienced practitioner in their chosen field (Colby & Sullivan, 2008). According to Colby and Sullivan, the apprenticeship taught the student not only the skills needed for the job, but also the broader context of how their mentor interacted as a professional in the community. In contrast, modern day higher education often focuses on teaching skill sets, with students completing internships and clinical rotations to practice their new skills under

supervision. Although one may see some similarities between internships and apprenticeships, it can be argued that the climate and depth of internships do not lend themselves to the development of social responsibilities as compared to apprenticeships (Colby & Sullivan, 2008; Delany & Watkin, 2009). Therefore, educators must rethink the methods by which students are learning what it means to be a professional.

While professional education has become more highly specialized, globalization and technology have changed the skill set needed for many jobs (Jones et al., 2016; Savickiene, 2010). In the healthcare industry, employees may face moral and ethical issues created by economic forces (Sullivan, 2005). As a result, educators have to cultivate student professionalism in a manner that will help students address real world dilemmas which they might face (Colby & Sullivan, 2008). Many professional programs have added an ethics course to their curriculum, but the complexity of modern health care may require a more comprehensive educational approach (Sullivan & Rosin, 2008a). Students need to understand that in order to gain public trust and respect, they must embrace the civic responsibilities, ethical standards, and commitments that accompany their profession (Colby & Sullivan, 2008; Sullivan, 2004).

Professional schools should recognize their responsibility to cultivate students' professional formation (Rabow, Remen, Parmalee, & Inul, 2010; Sullivan, 2004). Educators must look closely at curricular approaches to determine how to effectively help students to embody the purpose of one's profession. To fully understand the public with whom they work, professionals must have a deeper understanding of how individuals or groups live their lives. Shulman (2011) suggests that:

a good education prepares a student to dig deeply, critically, and analytically when confronted with a problem; to be able to see the same problem analytically from different

points of view; and perhaps most important, to develop a sense of self and personal identity in which these capacities and dispositions are well integrated. (p. ix)

Shulman continues that, “disciplinary specialization is a powerful way to expand knowledge; it is a terrible way to apply it” (p. x).

Some professional schools have started to show interest in the role the humanities can play in their curriculum. For instance, business school deans are beginning to recognize the value of liberal arts education to ensure their students’ success and marketability (Appelbaum, 2016). Discussing liberal learning in business education, Colby, Ehrlich, Sullivan, and Dohle (2011) suggest that liberal arts cultivate analytical thinking skills, the ability to look at a problem through multiple frames, the reflective exploration of meaning, and the development of “practical reasoning”, a concept that will be discussed later in this chapter. According to Colby et al., most business educators “are strong supporters of educating toward a complex and pluralistic understanding of the world and want their students to understand perspectives other than business” (p. 51). A survey by Hart Research Associates (2016) conducted on behalf of the Association of American Colleges and Universities (AACU) found that of 400 employers surveyed, the majority reported that they feel students need to learn both a specific skill set and a broad knowledge base to achieve long-term career success. It is important to note that although upper level managers support the value of a liberal education, Colby et al. found that middle managers may be more focused on useful skills in employees. This research suggests that although a humanities background is valued by some, there are still people who do not appreciate its full potential. Organizations such as the Carnegie Foundation for the Advancement of Teaching have performed work which will help to raise awareness of the links between humanities and the professions.

Carnegie Foundation’s Preparation for the Professions Program. Comprehensive work linking the professions and humanities in modern education has been performed by the Carnegie Foundation for the Advancement of Teaching. In 2002-2003, the foundation brought together faculty from various professions, sciences, and liberal arts for a seminar with the aim of identifying the best strategies for cultivating “practical reasoning” (Sullivan & Rosin, 2008a). Practical reasoning is described as “being able to quickly grasp the important aspects of their clients’ or patients’ situations, interpret them in light of the profession’s distinctive base of knowledge, and then reach a judgement about the best course of intervention for the well-being of those they are attempting to serve” (Colby et al., 2011, p. 56). Practical reasoning combines use of general knowledge and reflection on the challenges of a given situation to formulate a decision on how to act (Sullivan, 2010). Similar in meaning to the medical education term ‘clinical reasoning,’ practical reasoning is just one of many proposed benefits of the use of humanities in professional education.

The seminar was an extension of the Preparation for Professions Program (PPP), whose purpose was to look at the goals and practices of professional education in law, engineering, nursing, medicine, and theology by examining curricula, pedagogies, and assessment strategies (Colby & Sullivan, 2008). According to Colby and Sullivan, the program recognized three “apprenticeships” common to professions reminiscent of Bloom’s three domains of learning: intellectual training, skill-based practice, and ethical and social roles and responsibilities. Colby and Sullivan highlighted the importance of the “third apprenticeship,” ethical and social roles and responsibilities, explaining that it “draws together and grounds the two most essential features of high quality work- deep expertise and ethical commitment” (p. 411).

Participants in the PPP seminar shared a common goal of wanting not only to teach students professional knowledge and skills, but also to develop their “practical judgment,” the ability to make decisions in complex or unclear situations (Sullivan & Rosin, 2008a).

Seminar participants collaborated to identify four common educational goals for professional students: the development of a professional identity, the understanding of the role that their profession will serve in the community, embodiment of professional responsibility, and obtainment of the knowledge needed as a professional in their field (Sullivan & Rosin, 2008a).

As stated by Colby et al. (2011),

Aspiring professionals need to learn how to draw on their knowledge and skill as they make judgements in particular situations. They must become agile in pulling together multiple sources of knowledge and points of view as they work with others to define and solve problems, learn how and when to intervene with a patient or client, and understand how to act in a challenging situation so that they uphold the best traditions of professional competence and integrity. Professional preparation must provide the experiences and the reflection on those experiences to enable students to make the best possible decision in that particular time, place, and circumstance. (p. 56)

This “knowing how”, which is the basis of “practical reasoning”, has been the focus of the PPP (Sullivan and Rosin, 2008a).

Benefits of the Study of Humanities in Health Profession Education

The benefit of humanities integration in the education of health professionals has received increased attention in recent decades. Humanities are proposed to foster the values and attitudes that are goals of health professional education (Newell, 1989). Chiavaroli and Ellwood (2012) identify “empathy, compassion, self-care, emotional understanding, patient perspectives,

communication skills, culture competency, [and] professional service delivery” as expected outcomes of humanities in medical education. Lazenby (2012) suggests humanities in curricula as an antidote to the emphasis on scientific fact, stating that humanities “enable (practitioners) to think critically, to transcend local loyalties to approach global health problems as world citizens, and to engage in the continuous sympathetic exercise of imaging the health predicaments of other people” (p. e10). Humanities may provide health care practitioners with a broader understanding and perspective of their patients, enhance observation skills, and foster introspection, reflection, and critical thinking (Doukas et al., 2013; Macneill, 2011). McKie (2012) explored the use of art and literature within a nursing curriculum and concluded that the approach contributed towards the achievement of ethical practice, increased responsibility for learning, and different perspectives on human experience.

Lake, Jackson, and Hardman (2015) performed a comprehensive review of the literature and identified four main themes on the benefit of inclusion of humanities and the arts in medical education. The first of these themes, professional development, includes the cultivation of critical thinking, reflection, communication skills, leadership, observation and diagnostic skills, empathy and humanistic behaviors. The second theme highlights the use of humanities and arts to create innovative pedagogical technique, giving students a more active role in their learning. The third theme focuses on the humanities’ ability to develop student creativity and imagination instead of technical proficiency alone in classes that traditionally focused on the acquisition of skills. The fourth and final theme suggests that humanities integration can serve as a method of inspiring students to view practice as a succession of performances rather than as a competency, inspiring life-long growth and development. The identified themes demonstrate how humanities can impact the personal growth of students through effective pedagogy (Lake et al., 2015).

It is suggested that the humanities develop professional behaviors in medical and health profession students (Bumgarner et al., 2007; Lake et al., 2015; J. Shapiro et al., 2009). Although the term “professional” can be used in a variety of contexts, Gardner and Shulman (2005) identified characteristics of a professional that are generally agreed upon: a) a commitment to serve in the interests of clients and the welfare of society b) possessing a body of specialized knowledge c) having specialized skills unique to the profession d) demonstrating the ability to make judgments with integrity e) utilizing an organized approach to learning from experience f) and recognizing the responsibility of a professional community to oversee and monitor quality in both practice and professional education. Professionalism has long been included as part of training in medical and health profession programs, but students are not always demonstrating the desired attributes (Shapiro & Rucker, 2003). Humanities are suggested to develop many traits expected of health professionals including moral reasoning, ethical behaviors, empathy, the ability to see a patient holistically, reflection, openness to other viewpoints, and cultural competence (Blanchet Garneau, 2016; Charlton, 2007; Davis, 1985; Kumagai & Wear, 2014; McKie, 2012; Wear, 2003). A liberal education is suggested to help “professionals address the complexity, ambiguity, and rapid change inherent in current practice” (Hagerty & Early, 1993). Epstein and Hundert (2002) claim that humanities can build clinical competence by helping students to understand the importance of context. Gutierrez and DasGupta (2016) emphasize that humanities can remove students from their areas of comfort, making them explore and reflect upon their biases and assumptions. Staricoff (2006) claims that humanities help students to critically evaluate their assumptions and arguments, allowing them to see the world in a different light. Barnard et al. (1995) discussed the incorporation of religion and spirituality in medical education as tools for exploring meaning, values, and diversity.

Despite the support that the integration of humanities into professional education has received, some question the proposed benefits. Although the use of humanities to improve education of health professionals is frequently mentioned in the literature, evidence of impact is lacking (Hall et al., 2014). Instruments exist to measure affective behaviors but are largely subjective with questionable validity (Savickiene, 2010). Wershof-Schwartz et al. (2009) claim there is not sufficient evidence in the literature to support the hypothesis that humanities can affect professional behaviors. Difficulty assessing the effect of humanities on student growth makes it difficult to gain full support for their use (Savickiene, 2010).

Some question if educators should attempt to assess the impact of the humanities at all (Fins, Pohl, & Doukas, 2013; Goldberg, 2013; Savickiene, 2010). Goldberg (2013) asserts that it is short-sighted to focus on the humanities as a means of creating more humane and caring health care providers, as it is difficult to clearly demonstrate how one directly leads to the other. Instead, he suggests that medical and health humanities are valuable regardless of what measurable impact they have. In Goldberg's view, attempting to establish the impact of the study of humanities on health care providers minimizes the health humanities' true value (Goldberg, 2013).

Fox (2008) raises a different point, making the argument that there is no true dichotomy between professional education and liberal education, and suggesting that the concept of liberal arts should be reconsidered in a more current manner. In Fox's view, liberal education does not require exposure to different disciplines such as humanities but instead to certain manners of thinking, which Fox argues is already accomplished in standard physical therapy education (Fox, 2008).

A final concern is that humanities and professional education may not complement each other without an effective instructor to facilitate their connection (Beveridge, Fruchter, Sanmartin, & deLottinville, 2014). Facilitation may present as a challenge for health profession educators, as their familiarity with pedagogical technique for use of humanities may be lacking. Beveridge et al. suggest that it is imperative for an instructor to “challenge the beliefs and biases of their students to encourage true reflective practice; otherwise, the theoretical value of reflection is not always attained.” They continue, “Instructors must clearly define the learning objectives they hope students will attain through reflection, and communicate these ideas continuously to promote the type of learning that they desire” (p. 70). Anthony and Templin (1998) examined one nursing faculty’s efforts to promote the importance of liberal education through their involvement in general education teaching and found that faculty initially had significant discomfort about their expertise in teaching non-nursing classes, matched by some students’ concerns about nursing faculty being able to teach such classes. However, after gaining experience teaching within the general education model, nurses were eventually better able to draw the links between liberal learning and nursing, making it relevant (Anthony & Templin, 1998).

Although there are criticisms and concerns regarding the use of humanities in professional education, some programs have begun to recognize and embrace their role (Sullivan & Rosin, 2008). Medical schools have been leaders in using the humanities to impact professional curricula (Dolan, 2010). Medical humanities have been offered at some schools for over half a century and continue to be an area of growth and development.

Medical Humanities

Medical schools began to widely adopt the humanities into their curricula in the 1960's and 1970's in response to moral dilemmas within the profession (Dolan, 2010). Medical humanities encompass the use of arts and humanities in the context of medical practice and pedagogy (Atkinson, Evans, Woods, & Kearns, 2015). The field of medical humanities is broadly defined and may include any coursework that examines the human condition, such as "history of medicine, bioethics, narrative medicine, medicine in literature, creative writing, and various social sciences" as well as "creative arts" (Dolan, 2010). Some programs make medical humanities a required part of the curriculum, while others offer medical humanities as electives.

Shapiro, Coulehan, Wear, & Montello (2009) recognized three characteristics common to all medical humanities. First, humanities concepts are used as a tool to examine human conditions such as pain, suffering, and disability in the classroom. Second, the aim of using medical humanities is to develop more humane practitioners through cultivation of self-awareness and understanding. Third, an interdisciplinary, collaborative approach to education is used in the classroom (Shapiro et al., 2009). Medical humanities may create an "additive view," where the humanities are used to soften a medical practitioner's approach, or an "integrative view," where the overall practice of medicine is shaped by understanding of the human experience (Greaves & Evans, 2000). Proposed benefits of medical humanities include improved analytical skills, ethical formation, and the consideration of alternative viewpoints (Donohoe & Danielson, 2004). According to Fins et al. (2013), "Philosophy, history, literature, and the arts already offer a discourse instrumental to reflective practice. These disciplines encourage introspection and a deeper understanding of how medicine operates within society" (p. 355).

Medical humanities were formally introduced in 1967 at the Pennsylvania State College of Medicine by Dr. George Harrell (Dellasega et al., 2007), although the need to include topics such as spirituality into medical school curriculum was documented many decades earlier (Barnard et al., 1995). Originally, medical humanities focused on ethics, then grew to include narratives, arts and healing, and spirituality (Dellasega et al, 2007). In the 1980s, both the Association for American Medical Colleges and the Commission on the Humanities called for increased humanities in medical school curricula (Povar & Keith, 1984). By 2011, 69 of 133 accredited medical schools in the United States required that students take at least one course in the medical humanities (Banaszek, 2011).

The use of humanities in the education of health professionals gradually expanded beyond medical school but continued to be called medical humanities. In the last decade, however, the term “health humanities” began to be used more frequently to encompass many other health care fields, broadening the scope from medicine alone to therapists, nurses, caregivers, and patients, among others (Jones et al., 2016). The new designation was born in part due to a perceived exclusion of health professionals beyond medicine, a concern which some argue was misguided (Atkinson et al., 2015). The term “health humanities” is considered to be more inclusive of all professions, recognizing the many disciplines that use the humanities to enrich patient care (Crawford, Brown, Tischler, & Baker, 2010). Health humanities studies are said to include a higher level of attention to the complexity of what defines overall well-being, as well as “intersectionality,” a term which refers to the study of how different types of disadvantage interact and impact a patient (Jones et al., 2016).

Despite the fact that medical humanities have been a growing area of study within medical schools for decades, there remains significant debate about how and where to add

humanities into curriculum (Chiavaroli & Ellwood, 2012; Petersen, Bleakley, Brömer, & Marshall, 2008). At some schools, medical humanities are taught as a separate course, but Chiavaroli and Elwood (2012) argue that integrating humanities with other coursework solves the problem of having limited room in the curriculum. Numerous examples can be found in the literature of effective methods of humanities integration.

Examples of use of medical and health humanities. The Mayo Medical School represents one program which has successfully integrated humanities into its curriculum, using various humanities-based activities to enhance learning, including writing prose and poetry, theatrics, reflective writing, and storytelling (Rian, 2014). Use of reflective narrative has been found to be instrumental in aiding self- reflection skills (Wald & Reis, 2010). Shigley (2013) documented the impact of an undergraduate literature and medicine class in which students from various disciplines explored issues through poetry. Shigley explains, “Literature, despite its sometimes less than transparent surfaces, leads students to see issues from the inside: the physician delivering a difficult diagnosis, a nurse confronting her own mortality” (p. 430). According to Short and Grant (2016), who use poetry in nursing education, “As a pedagogic approach, poetry therefore creates a space for writers and readers to explore events and ways of experiencing the world which are often silenced by conventional knowledge and curricular content” (p. 61).

Art is also commonly used as a pedagogical tool in medical and health profession education. At Yale Medical School, first year students take a course in which they study art at the campus museum to sharpen their observational skills (Banaszek, 2011). At the University of California Irvine School of Medicine, second year medical students study a series of self-portraits performed over time by a patient with Alzheimer’s disease (Shapiro, 2017). In this

project, students are asked to not only reflect on the progressive course of the disease, but also on the person behind the art (Shapiro, 2017). Similarly, a nursing course at LaSalle requires students to answer questions about works in the art museum in order to reflect on the human condition (Davis, 1992). According to Davis,

Displaying people of various ages in various cultural milieus, sometimes engaging in activities of daily living, within varying chronological and cultural and ethnic frameworks, challenges the student nurse to apply current assessment skills to people, situations, and time in milieus outside of their own daily activities and practice settings. (p.93)

Wikstrom and Sviden (2007) use visual art to help students develop dialogue with patients, suggesting that creative arts can be a more powerful pedagogical tool than using written examples. Naghshineh et al. (2008) claim that art observation exercises improve medical and dental students' visual diagnostic abilities. Donohoe and Danielson (2004) describe an impactful project where students read literature, then engage in a community project to reinforce the themes presented in the literature.

Although examples of humanities integration in the literature are plentiful, evidence of their effectiveness is limited and largely anecdotal. Empathy is one area said to be cultivated through humanities integration which can impact delivery of care. Hojat et al. (2011) found that physicians with higher empathy scores on a validated test had better clinical outcomes in the care of diabetic patients than those with a lower score, suggesting that better empathy skills may improve patient care, possibly due to the communication and understanding resulting from the patient-physician relationship. Naghshineh et al. (2008) found that medical students who had

taken a course analyzing famous works of art demonstrated better visual diagnostic skills than a control group.

Student perceptions of medical and health humanities. Despite the widely accepted use of the humanities in many medical and health profession schools, not all students embrace them in the curriculum. Shapiro, Coulehan, Wear, and Montello (2009) explored student complaints and critiques about the medical humanities and identified three main areas of discontent. First, relevance of content was an area of concern. Students did not feel the humanities were clinically applicable, not grasping how literature improves skills for practicing medicine. Students expressed that they went to medical school to study scientific, fact-based classes, and did not expect something that they weren't interested in studying being part of their curriculum. Some students enjoyed the humanities component to their curriculum, but saw it as a diversion from science classes rather than a purposeful teaching tool. Students tended to think that medical humanities should be offered as an elective rather than a core part of the curriculum (Shapiro et al, 2009).

The second problem area identified by Shapiro et al (2009) regarded student perceptions of teachers in the humanities when an interdisciplinary approach was used. Medical students were found to value medical faculty over non-medical faculty on course evaluations and didn't feel that non-medical teachers understood the complexities of medicine, a problem echoed in other literature (McCartan-Welch, 1997; Wetzel, Hinchey, & Verghese, 2005).

A third identified area of discontent with humanities was that students were uncomfortable with teachers asking them to reflect on their values and attitudes, finding it to be intrusive (Shapiro, Coulehan, Wear, & Montello, 2009). Similarly, Smith et al. (2004) assessed a humanities based activity in a nursing course where students were asked to select a piece of

artwork that represented their current concept of education and write about it, display it, and have classmates discuss it. The researchers found that students expressed unease due to the unknown element surrounding the project; however, after actively participating in the project, their enjoyment was reportedly increased (Smith et al., 2004). These findings may suggest to educators that addressing students' discomfort and making them feel safe to participate are crucial for success of humanities integration.

Several articles from nursing education programs show mixed results in student attitudes towards humanities integration. A study by Hagerty and Early (1993) examined practicing nurses' perceived value of their liberal arts education. They found that subjects felt the liberal arts and associated extracurricular activities positively impacted how they viewed and interacted with the world. However, the subjects described the benefits of liberal arts more on a personal than a professional level, causing the researchers to question if educators need to make the professional link more explicit. Researchers found that subjects frequently described "trigger experiences" created through the liberal arts which fostered their learning experiences (Hagerty & Early, 1993).

A similar study by Peck and Jennings (1989) surveyed both current and alumni nursing students on the importance of their liberal arts education. Peck and Jennings found that while both groups voiced positive recognition of the role the liberal arts played, alumni had much greater appreciation for the impact of liberal arts in their professional education. The study also found that current students showed personal responsibility for finding relevance between the humanities and their profession, a divergent finding from those who suggest that faculty must find ways to draw the links (Peck & Jennings, 1989).

DeBrew (2010) found in a study of pre-licensure and graduate nursing students from one large nursing school that both groups valued the impact of the liberal arts on their education with no statistical significance between the majority of responses of the groups. Both groups credited their liberal arts education for building communication and interpersonal skills, global thinking, academic growth, attitudes towards diversity, and professional growth. The pre-licensure students were found to credit the liberal arts with their ability to think critically more than practicing nurses. Both groups were found to be very articulate in discussing the meaning and value of their liberal education (DeBrew, 2010), a finding that diverges from previous studies (Hagerty & Early, 1993; Peck & Jennings, 1989). The differences in the results of these studies correlated with the decades in which they were completed may suggest that student perceptions of humanities have changed in the current decade.

A limited number of studies have looked at the integration of humanities-related activities in physical therapy education. Sellheim (2003) found that physical therapy students preferred active learning activities over passive, with added context allowing a deeper approach to learning. Sellheim suggests that active processes enable students to create their own meanings between old beliefs and new ideas, echoing the philosophy behind transformative learning theory (Sellheim, 2003). Although Sellheim did not specifically discuss humanities as the method of creating active learning processes, his study suggests an effective way in which humanities can be used pedagogically. Smith et al. (2006) found that physical and occupational therapy students expressed anxiety about using humanities in coursework and had decreased perception of their value, although some had positive feedback at the end of the exercise which integrated humanities. Cruz, Caeiro, and Pereira (2014) found that a narrative reasoning course integrating

arts, literature, and reflective writing into physical therapy education created a transformative learning experience for students, helping them to become more patient-centered.

Integrating Humanities into Physical Therapy Education

Physical therapy education programs must continue to refine curriculum and pedagogy to meet the complex demands of the profession. Jensen (2011) states, “ We need to help our students develop a deeper sense of social responsibility that moves beyond service learning and volunteer experience to understanding the broader social and structural forces that contribute to health disparities” (p. 1681). Literature from medicine and nursing suggests that integration of the humanities into physical therapy curriculum may enhance the affective domain of education.

Sullivan and Rosin (2008a) identify several issues of which educators must be aware when attempting to integrate humanities. First, developing a curriculum which effectively uses humanities will take time and patience. A collaborative effort among faculty, open dialogue, and sufficient time to work on change will be crucial. Second, at an institutional level, it is important that faculty be able to partner with others from outside their discipline to gain a broader perspective on the humanities. Institutional support must assist efforts for collaboration. Third, dialogue among faculty members from a variety of professions and disciplines is important to foster connections and common purposes between them. Sullivan and Rosin suggest that different departments within a university often vie for resources and tend to alienate themselves from one another, a potential problem which must be overcome to allow the curricular potential that they can offer to one another. Fourth, each professional school has its own contextual challenges which must be addressed specific to the individual institution when attempting to integrate humanities. There is no one size fits all approach (Sullivan & Rosin, 2008). These

suggestions must be considered throughout the planning and implementation of integrated humanities in order to foster successful outcomes.

According to Lake et al. (2015), a challenge of selling faculty on the effectiveness of humanities integration is the difficulty measuring impact on course objectives. The evidence base for the effectiveness of using arts in medical education is weak, and traditional methods of assessment are difficult to use due to the variability and complexity of the arts (Lake et al., 2015). Most current standards of evaluation are designed to look at technical competency and do not reflect the impact created by humanities (Lake et al., 2015).

A consortium of medical educators suggested that educational outcomes in the humanities should not be assessed quantitatively, nor should they be oversimplified; rather they should be assessed in a qualitative manner with a view that each student acquires skills in an individualized, incremental way (Doukas et al., 2013). Epstein and Hundert (2002) suggest that patient or peer-ratings of students may be much more valid and accurate than self-ratings when looking at development of professionalism. Sellheim (2003) concurred that open-ended approaches are needed to look at learning in students beyond the surface. Effectiveness of arts-based pedagogy should be considered from a developmental rather than competency-based approach (Lake et al., 2015). Savickiene (2010) suggests the need for clear objectives to be written regarding development of the affective domain to explicitly stress its importance to students.

Beyond difficulties with assessment, there are other reasons why physical therapy faculty may be slow to integrate humanities into the curriculum. In a study of the integration of humanities into nursing education programs, Herman (2004) identified the main reasons for lack of humanities integration as: a) lack of preparation of faculty as educators b) the content driven

nature of the curriculum c) the amount of time needed to create humanities experiences in the curriculum d) the belief that humanities were already addressed through general education curriculum e) and concern about focusing curriculum on the type of information found on board questions. Sellheim (2003) suggested that physical therapy educators may be hesitant due to lack of knowledge of pedagogy needed to effectively create deep learning experiences. Porvar and Keith (1984) found that faculty felt limited in adding liberal arts to the curricula due to lack of time and trained faculty. To address the time issue, Hall et al. (2014) attempted to integrate humanities into nursing curricula during clinical placements via self-learning modules, recognizing that educators have difficulty adding humanities into what is an overcrowded curriculum. The researchers concluded that although this method showed promise, there were still many necessary modifications to make it more effective in future attempts.

Faculty discomfort or unfamiliarity with humanities integration may create a significant barrier to adding humanities to their courses. Effective use of humanities as a pedagogical tool might require a skilled educator to facilitate reflection (Johnson & Jackson, 2005). If teaching of the humanities is not inspired, the integration of humanities and science may not be effective (Newell, 1989). Doukas et al. (2013) suggest that successful humanities integration requires properly trained faculty, a facilitative environment, and insight into how to use humanities to build professionalism effectively. Domholdt (2007) recommends that physical therapy faculty bring humanities faculty into the classroom for interdisciplinary collaboration to increase effective use of liberal arts, although McCartan-Welch (1997) argues that this approach may lead to decreased student buy-in.

Theoretical Models/Conceptual Framework

In order to better understand how the humanities and professional education can complement and enhance one another, it is important to analyze the theoretical models which help to explain their interaction. Doukas et al. (2013) suggest that development of professionalism requires transformative change. Mezirow's (1997) transformative learning theory claims that a carefully designed curriculum aimed at expanding one's views can alter one's values and attitudes. Donald Schön's (1987) theory on reflection-in-action complements transformative learning and suggests that development of the skill of reflection can enhance development of professional behaviors. Finally, the concept of integrated curriculum explains the importance of studying humanities concurrently with professional coursework rather than relying solely on students' prerequisite and undergraduate general education coursework.

Transformative Learning

Mezirow's Transformative Learning theory should be considered when examining how the humanities can be effectively used in professional education. Mezirow believed that people form their own reality based on personal experiences, and that an individual's views of the world can be difficult to change because they unconsciously become deeply ingrained (Christie, Carey, Robertson, & Grainger, 2015). These individual views serve as a "frame of reference" for the way in which an individual thinks and acts, influenced by "habits of mind" and a "point of view" (Mezirow, 1997). Mezirow describes "habits of mind" as ways of thinking, feeling, and acting that one develops through their own experiences, while "points of view" reflect how one's values and attitudes impact their interpretation of a situation (Mezirow, 1997). The only way to change established habits of mind are through what Mezirow terms a "disorienting dilemma," an experience which occurs when an idea challenges one's reality. Such an event can cause a person

to look at a situation in a new way, reexamining their values and assumptions (Mezirow, 1989). Rooted in constructivism, Mezirow's theory is based on the premise that people create their own understanding of the world based on their experiences and reflections. The implication of this theory to educators is that classroom experiences should be carefully designed to create and cultivate transformational learning experiences for students.

Christie, Carey, Robertson, and Grainger (2015) use transformative learning theory to suggest that educational experiences in which students' realities are questioned will foster their abilities to transfer classroom knowledge into new and unexpected situations potentially faced in their professions. According to Christie et al. (2015), "If students are given the motivation, the means, and the knowledge necessary to critically assess, challenge, and change their assumptions they will have the best chance to become lifelong learners capable of acting for the best in a rapidly changing world." Kumagai and Wear (2014) also refer indirectly to transformative learning when discussing use of humanities and the arts in education as a way "to make strange." Kumagai asserts that by challenging one's assumptions, unconscious biases, and attitudes through mediums such as literature, film, theater, art, "estrangement" and "cognitive disequilibrium" occur, creating educational opportunities for reflection and action. The humanities may serve as an excellent pedagogical tool for creating transformative learning experiences.

Mezirow's theory is in part dependent on an individual's ability to reflect when a disorienting dilemma occurs. According to Mezirow (1989), "Reflective dialogue represents the most distinctively human attribute, the capacity to learn the meaning of one's own experience and to realize the value potential in nature through communication." Mezirow focuses on both the depth and quality of reflection to create a meaningful shift in thinking (Blanchet Garneau,

2016). It is crucial that educators give attention to formulating reflective activities through materials and exercises which promote deeper thinking. Transformational learning opportunities must be learner centered, participatory, and interactive (Mezirow, 1997).

Reflection-in-Action

Transformative learning requires that when faced with a disorienting dilemma, an individual must be able to reflect on the situation in the moment. In his book *Educating the Reflective Practitioner*, Donald Schön (1987) wrote about challenges faced by professionals, acknowledging that problems in the field don't occur as textbook examples but rather as "messy, indeterminate situations" (p.4). When faced with the "indeterminate zones of practice-uncertainty, uniqueness, and value conflict" (p.6), a professional must have the ability to respond effectively and ethically. In response to the concerns of professional educators wanting to bridge the gap between classroom knowledge and real world demands, Schön suggests developing the skill of "reflection-in-action", which is a reflective conversation a professional has with themselves during a given action. In this self-dialogue, a professional will listen to the responses and change the course of action as needed (pp. 26-31). Schön acknowledges that a person's reflection-in-action is strongly influenced by their own reality, including their perceptions, beliefs, and values (p 36). In order to impact the course of one's reflection, an educator must expose students to viewpoints and ideas which challenge their reality. Humanities may be an effective tool to accomplish this task.

Schön's reflection-in-action theory has significant implications for educators. Professional schools must create an environment and learning opportunities which give students the ability to practice reflection using effective mentorship and facilitation (p. 171). Educators and institutions must embody the importance of reflection in the curriculum in order to reinforce

the value of developing the skill (p. 171). A systematic review by Mann, Gordon, and MacLeod (2009) of reflective practices in health care education found that proper guidance, environment, adequate time, and peer support and collaboration are important in developing reflective skills in the classroom. Such findings underscore the importance of educators needing training, department and institutional support, and references for effectively integration humanities in the classroom.

Integrated Curriculum

When educators are addressing the use of humanities in professional coursework, it is suggested that an integrated curricular design be used. According to Case (1991), integrated curriculum allows educators to design a course in a way that connects different subjects or disciplines to deepen understanding, as many phenomena cannot be well understood from a single disciplinary perspective. There are four objectives of integration: to add depth to understanding of a subject, to broaden student perspectives on subjects, to demonstrate that all knowledge is interrelated, and to introduce material in an efficient way (Case, 1991). Integration can be horizontal, where multiple subjects are taught together in a meaningful way, or vertical, where knowledge is added over time with greater complexity, similar to the strategy of scaffolding (Pearson & Hubball, 2012).

Goals of integrated curriculum include the ability to synthesize classroom information with real life experiences out of the classroom, the ability to come to conclusions based on multiple perspectives, the ability to transfer classroom learning to new situations, the ability to communicate in ways that enhance meaning, and the ability to deeply reflect and be self-aware (Association of American Colleges and Universities, n.d.). Although there is a lack of consistent research-based evidence that an integrated curriculum causes students to meet all stated

objectives, there is also not enough strength to current studies to show that an integrated curriculum is not effective (Pearson & Hubball, 2012). When planning to add humanities to the curriculum, educators should consider designing humanities into existing coursework in order to make it the most meaningful and impactful.

Summary

Physical therapy has evolved significantly as a profession, creating the need for educators to consider curricular changes which will fully develop students' professional behaviors. The literature suggests that use of the humanities in the curriculum can enhance the relevance and applicability of classroom objectives. Integration of the humanities into physical therapy curriculum is an important educational strategy for addressing development of the affective domain of learning. However, there is a gap in the literature regarding the use of humanities in physical therapy education, suggesting that humanities are underutilized and under recognized as a pedagogical tool.

In order to facilitate the use of the humanities in physical therapy education, it is important to investigate a program which has shown leadership and success in integrating the humanities. Through description and analysis of how the humanities are effectively used in one program, a reference may be created to facilitate the use of humanities in other physical therapy programs. Chapter III will explain the methodology that was used to explore one physical therapy education program known for its strong commitment to the use of the humanities in the education of its students.

CHAPTER III

METHODOLOGY

Changes to the degree requirements and expectations in physical therapy over the last two decades have created new curricular challenges for educators (Anderson & Irwin, 2013; Hayward & Blackmer, 2010; Sullivan, et al, 2011). While methods of developing physical therapy students' clinical knowledge and skills have been well-researched and documented, physical therapy faculty continue to seek successful methods for teaching and promoting skills in the affective domain such as professionalism, empathy, and ethical behaviors (Jensen, 2011). Research in the fields of medicine, nursing, law, and business education suggests that integration of humanities coursework into the curriculum is an effective method for developing professionalism (Sullivan, 2010). However, little is known about the ways in which physical therapy programs perceive or use the humanities, the methods of successful humanities integration into physical therapy curriculum, and the benefits of integration for physical therapy students. This chapter addresses the methods that were used to examine the integration of humanities in one physical therapy program.

Purpose Statement

The purpose of this qualitative case study was to examine a physical therapy program which is a leader and has shown success with integrating the humanities in its curriculum. This study will raise awareness and understanding of the benefits of humanities integration in physical therapy education and serve as a model for other physical therapy programs looking to increase humanities programming in their curriculum.

Research Questions

1. How and in what content areas are the humanities being integrated into the physical therapy curriculum?
2. What are the attitudes and perceptions of faculty and students regarding the value of the humanities?
3. What are the expected outcomes of integration of the humanities and how are they assessed?
4. What departmental and institutional factors are present which support the integration?
5. What are the challenges to successful humanities integration in the curriculum?

Subject

Because the focus of this research was to examine a physical therapy program which is currently integrating the humanities into its curriculum, purposive sampling was required to find an appropriate institution to study. The subject of the study was a physical therapy program known to be successfully integrating humanities into the curriculum. The program first was identified at a recent national APTA conference at which it gave a presentation on an interdisciplinary course offered on its campus integrating science and humanities. Following the presentation, one presenter was approached to learn more about humanities use in the curriculum. Upon further investigation, it was discovered that the program had also developed an online journal focused on the intersection of rehabilitation science and humanities, and had faculty representation on the board of the Consortium for Humanities, Ethics, and Professionalism in Physical Therapy Education. From that conversation, it was evident that the physical therapy program would be an appropriate subject to consider for the study.

To determine if there were other physical therapy schools that should be considered as subjects for the study, two known leaders in physical therapy education were consulted regarding the appropriateness of this university to be studied. Both concurred that this university was a leader in the use of humanities and a good fit for the purpose of the study.

Research Design

This study examined one physical therapy program and the climate, perceptions, and attitudes influencing the integration of humanities into its curriculum. A qualitative approach was identified as the most appropriate method to provide the desired depth of inquiry considering the purpose of the study and accompanying research questions. It was important that this study examine the factors involved in successfully integrating humanities into the curriculum and sought understanding of the complexity of their use (Creswell, 2014). Qualitative research, which is used to explore, was better suited for this research than quantitative, which is used to explain (Creswell, 2014, p. 63). To thoroughly investigate the program from multiple angles, interviews were used as well as document and artifact analysis, an approach that is suited to qualitative research methodology (Creswell, 2014, p. 64). Quantitative research, on the other hand, uses specific, narrow questions and provides a data set from which variables can be measured (Creswell, 2014, p.14). A survey was considered for this research in its early stages, but it was decided that a survey might not provide the desired richness of data nor allow the researcher to probe or expand unidentified emerging themes. Although a survey can be used to examine attitudes, opinions, characteristics, and perceptions, the questions can not be adjusted to seek further understanding of complex issues that arise. Open-ended questions through a qualitative research approach allowed deeper exploration of the many factors to be considered concerning curricular integration of the humanities.

Recognizing that there are varying categorizations of qualitative approaches throughout the literature, Creswell (2013) describes five main categories of qualitative approaches: narrative, phenomenology, grounded theory, ethnography, and case study. The author recommends that it is important to identify which approach is being used to provide the researcher with structure and organization, as well as to give reviewers a way to assess it (Creswell, 2013). This study was conducted as a case study, described by Creswell as an in-depth understanding of a single case within a real-life setting. Research involved the study of one single system, the physical therapy department at one university. In-depth data collection was performed primarily on-site using multiple sources including documents, interviews, and observations. A case report was written to analyze the data, with emerging themes identified.

Creswell (2013) explains four main philosophical assumptions which are important to understand when conducting qualitative research. The first, *ontological*, refers to the fact that each person construes their own reality, including study participants, the researcher, and even a person reading the study. The concept of multiple realities should be kept in mind when discussing the results of the research. The second, *epistemological*, reflects that qualitative knowledge is known through individuals' subjective experiences. This assumption directly relates to the importance of performing a qualitative study onsite or in the field to deepen the understanding of the experience. The third, *axiological*, assumes that researchers, as well as participants, bring their own values to the study and that it is important to report biases and values in the research. The final assumption, *methodology*, reflects that qualitative research is inductive and that the data collection may need to be modified once the study has begun to reflect new questions or pathways that are discovered. These four philosophical assumptions helped to guide the analysis and reporting in this study.

Pilot

Institutional Review Board approval for Research Involving Human Subjects was obtained prior to beginning any research. A faculty interview protocol (see Appendix A) was designed and piloted with a physical therapy faculty member at the researcher's institution who currently uses humanities in their teaching. A separate student interview protocol (see Appendix B) was designed and piloted with a current student at the researcher's university who has completed coursework that includes use of humanities. Feedback was gathered during the pilot study and slight adjustments were made to interview protocols were made based on the information obtained. The graduate interview protocol was not piloted but was slightly modified from the student protocol (see Appendix C) to reflect completion of the program. A fourth interview protocol (see Appendix D) written for the physical therapy program director was adjusted based on the changes made in the faculty protocol.

Planned interview questions were compared to research questions on an interview matrix to ensure that each research question was being addressed thoroughly through the interview process (See Table 3.1).

Table 1

Interview Matrix

Research Questions	Student/Graduate Interview Questions	Faculty Interview Questions	Chair Interview Questions
1 .By which methods and in what content areas are the humanities being integrated into the physical therapy curriculum?	S3, S8 G3, G8	F2, F3	C4
2. What are the attitudes and perceptions of administration, faculty, and students regarding the value of the humanities?	S2, S4, S7 G2, G4, G7	F4, F5, F6, F7, F9	C2
3. What are the expected benefits and outcomes of integration of the humanities and how are they assessed?	S5, S6 G5, G6	F7, F8, F11	C7
4. What departmental and institutional factors are present which support the integration of humanities into the curriculum?	S10 G10	F5, F10	C3, C4, C6
5. What are the challenges to successful integration of humanities in the curriculum?	S9 G9	F5, F11	C5, C8

Data Collection

The proposed study site was contacted (see Appendix E) to confirm willingness to participate in the study. Written consent (see Appendix F) was then obtained from the physical therapy program being researched.

Purposive sampling for interview subjects was used, with a faculty contact from the physical therapy program identifying and inviting faculty, students, and graduates who either used or experienced humanities in the classroom and contacting them on behalf of the researcher. The faculty contact was given forms to be forwarded to identified faculty (see Appendix G), students and graduates (see Appendix H), and the department chair (see Appendix I) requesting participation in interviews. The Dean of the School of Medicine could not be interviewed as the university was in the middle of a transition period between Deans at the time of the study. Interview subjects included three second-year and two third-year physical therapy students, seven faculty members, four recent program or residency graduates, and the department chair, for a total of 17 subjects. One student was included based on the recommendation of another student; all other interviews were generated by the recommendations of the faculty contact. Once interview participants were confirmed, a schedule was designed to ensure that sufficient time was planned for the onsite visit.

Data collection was conducted on site over a three day period and included faculty, student, graduate, and program director interviews, as well as examination of documents and exploration of campus climate and resources. Interviews were conducted via face-to-face format with six faculty members, five current students, two graduates, and the program director. In addition, one video conference with a graduate and two telephone interviews with a faculty

member and graduate were performed at a later time with participants who were unable to participate in face to face meetings. A total of 17 interviews were completed.

Consent forms (see Appendix J) were reviewed and signed prior to each interview. A written protocol guided the questions in a semi-structured manner, and follow-up questions within the interviews were asked as needed to thoroughly explore responses. Notes were briefly taken during the interview to capture any nonverbal information that might not be remembered at a later time. Interviews were captured via digital audio recording and later transcribed by the researcher. Informal meetings were also held with other physical therapy faculty and a professor from Italian Studies involved in integrated humanities and health science opportunities. The researcher made notes in a journal during and after the visit, reflecting on thoughts and impressions of the experience.

Document analysis was performed prior to, during, and following the on-site visit. Both university and physical therapy program specific documents were investigated to look for department and institutional factors affecting integration of humanities. Artifacts and documents analyzed included course syllabi, departmental and institutional mission statements, event fliers describing various integrated humanities events, the online journal, and the official university website. Observation of campus climate and resources was completed by visiting the physical therapy classrooms, physical therapy faculty offices, the inpatient rehabilitation hospital where some faculty are housed, the library and Center for Digital Scholarship, the art museum, and various public gathering places on campus.

To maintain confidentiality, all participants' names were omitted in documentation, and descriptive data that could clearly identify the participants were not included in the data analysis. Member checking was performed by providing interview transcripts to the subjects via e-mail to

check for accuracy. Although all participants were agreeable to participating in follow-up interviews if needed, no reasons for further follow-up were identified.

Data Analysis

Data analysis methods followed the recommendations of Creswell (2014). Following transcription of the interviews by the researcher, all data and artifacts collected were organized into files using NVivo qualitative data analysis software. The transcripts and gathered documents were reviewed several times to obtain a comprehensive sense of the data, then coded to reflect various topics discussed. Once all documents and interviews were coded, the data were analyzed to identify common themes. Themes were then described using supporting evidence from the data. Triangulation, comparing the various interviews and data sources gathered and observed to cross verify information, was used as a means of validation.

Summary

This chapter discussed the choice of a qualitative case study design and the assumptions that accompany qualitative research. The chapter continued with site and subject selection, methods of data collection, and concluded with data analysis methods.

Chapter IV will describe the findings from this qualitative case study, including a description of the institution and participants and the data collection process. Research questions will be addressed, including identification of themes with supporting evidence, and the overall findings summarized.

CHAPTER IV

DATA ANALYSIS

The purpose of this study was to examine a physical therapy program which is currently integrating the humanities in its curriculum. The study sought to understand how the humanities can be used in physical therapy curricula, what the perceptions are regarding the use of the humanities, and the benefits and challenges of using humanities in physical therapy curricula.

The following research questions were addressed in this study:

1. How and in what content areas are the humanities being integrated into the physical therapy curriculum?
2. What are the attitudes and perceptions of faculty and students regarding the use of humanities?
3. What are the expected outcomes of integration of humanities and how are they assessed?
4. What departmental and institutional factors are present which support the humanities?
5. What are the challenges to successful humanities integration in the curriculum?

This chapter will discuss the institution studied and interview participants, the data collection process, and the data gathered.

A qualitative case study design of a single subject institution was the method for this study. Purposive sampling was used to identify a physical therapy program which was actively integrating humanities-related activities in its curriculum. The institution studied was identified initially following a national conference at which its faculty gave a presentation on use of humanities in its program. Following the presentation, one of the presenters was approached to learn more about humanities use in the curriculum. From that conversation, it was evident that this physical therapy program would be an appropriate subject to consider for the study.

To determine if there were other physical therapy schools that should be considered as subjects for the study, two known leaders in physical therapy education were contacted regarding the appropriateness of this university to be studied. Both concurred that this university was a leader in the use of humanities and a good fit for the purpose of the study.

One faculty member from the targeted university who presented at the national conference was contacted to determine if the program would be agreeable to being studied. This faculty member offered to serve as a liaison to get permission to study the program, as well as to identify and contact subjects to be interviewed. Once verbal permission to complete the study was obtained through the liaison, a formal document for site consent was sent to the institution. A three-day on-site visit was completed, during which 14 formal interviews were completed. In addition, buildings and gathering spots on campus were visited, informal meetings were held with other faculty and university employees, and a presentation by the Center for Digital Scholarship, which supports the online journal, was attended. Following the on-site visit, three additional interviews were completed via video chat or phone call. In addition, syllabi and other artifacts were examined, the digital journal produced by the department was explored, and mission statements and descriptions published on the university website were examined. Interviews were transcribed and coded using NVivo software. Follow-up e-mails containing the interview transcripts were sent to the participants for member checking. From the interviews, as well as documents and artifacts examined, themes emerged which will be identified in this chapter.

Description of Institution Studied

The university examined in this case study is a private liberal arts institution located in an upscale historic neighborhood within a metropolitan area. According to its official website, it is

comprised of four undergraduate schools and seven graduate and professional schools, with a total enrollment of approximately 15,000 students in the 2017-2018 academic year. The school was founded in the first half of the 19th century by a Christian church and became a university in the early 20th century. Much of the development on campus was made possible by the financial support of a major corporation associated with the school. The website boasts a significant amount of research funding while maintaining an emphasis on teaching. Initiatives in diversity, sustainability, and volunteerism and service are highlighted on the school's website. The mission statement includes, "To create, preserve, teach, and apply knowledge in the service of humanity."

The Department of Physical Therapy is housed within the School of Medicine. The department was established in the 1960s, initially offering a master's degree in medical science. Entry-level physical therapy certificates first were awarded in the 1970s, with the program evolving to an entry-level Master of Physical Therapy degree in the 1980s. In 2001, the program became a doctorate level. In subsequent years, the department began offering the option of dual degrees such as Master of Public Health (MPH) or a Master of Business Administration (MBA) in combination with a DPT; with a total of four dual degree options. According to its website, the program is accredited through CAPTE and is ranked highly by publications such as U.S. News and World Report.

There are approximately 25 physical therapy faculty in the department, most of whom still practice clinically or engage in research. Because the university boasts a large healthcare system which is primarily integrated into campus, faculty are able to easily shift back and forth between the two settings. The majority of faculty offices are housed within the same building as

the physical therapy classrooms and laboratory space, but several are located a short distance away in a rehabilitation hospital on campus.

Admissions to the physical therapy school are at a graduate level only, comprised of a mix of students who completed their undergraduate education at [the studied institution] and students who came from other institutions, including international students. According to the department website, the program accepts 70 students per cohort. There are very few prerequisite coursework requirements compared to most physical therapy schools, as pointed out by some of the participants. Students need to have at least a 3.0 undergraduate GPA, letters of recommendation, observation hours, and meet minimum GRE score requirements, but an on-campus interview and essay are strongly considered in the final selection of students for admission, per faculty report.

Campus Visit

The onsite research at the institution took place over three unusually warm fall days. The campus was busy with students and activities. A campus tour revealed a mixture of the old and the new, with large modern buildings and busy roads flanking the end of campus where the medical buildings and graduate schools in medicine and health sciences are located. A short distance away, a classic quadrangle, formed by pink and gray marble buildings, a grassy lawn, and shade trees, can be found. A nature preserve filled with old growth hardwoods anchors the far end of campus, creating a quiet contrast to the busy university environment.

Interviews primarily took place in a vacant office space set up for the interviewer, with three additional interviews occurring in faculty offices. Six faculty, five current students, two graduates, and the director of the physical therapy department, were interviewed on site. Three additional interviews of participants who could not be present for the campus visit, including one

faculty member and two graduates, were performed at a later time. Tables 2 (program director and faculty), 3 (current students), and 4 (graduates) provide a basic description of interview participants:

Table 2

Characteristics of Program Director and Faculty Interviewees

	Gender	Teaching Experience	Undergrad Degree
Program Director	Male	>20 years at university, 7 as program director	Physical therapy
Faculty Member 1	Male	>20 years on faculty	Humanities field
Faculty Member 2	Female	10-20 years on faculty	Biology
Faculty Member 3	Female	5-10 years on faculty, Taught elsewhere	Physical therapy
Faculty Member 4	Female	5-10 years on faculty	Natural science
Faculty Member 5	Female	<5 years on faculty	Physical therapy
Faculty Member 6	Female	<5 years on faculty	Biology
Faculty Member 7	Female	New faculty member, taught elsewhere	Rehabilitation Science

Note. Content areas represented include Human Anatomy, Neurorehabilitation, Cardiopulmonary, Geriatrics, Ethics and Professionalism, Interpersonal Communication, Fundamentals of Measurement, Teaching and Learning, Growth Processes Across the Lifespan, General Medical, Intro to Interventions, Administration, Clinical Internships

Table 3

Characteristics of Current Student Interviewees

	Gender	Undergrad attended	Undergrad major
Student 1 (Year 3)	Female	Studied institution	Double major in biology/humanities
Student 2-(Year 3)	Female	Different institution	Biology
Student 3 (Year 2)	Female	Different institution	Humanities field
Student 4 (Year 2)	Male	Different institution	Biology
Student 5 (Year 2)	Male	Different institution	Rehabilitation science

Table 4

Characteristics of DPT and Residency Graduate Interviewees

	Gender	Schools attended	Undergrad major
Graduate 1	Female	Undergrad at different institution	Double major in humanities fields
Graduate 2	Female	Undergrad at different institution	Biology
Graduate 3	Female	Undergrad at different institution (liberal arts) Completed both DPT and PT Residency at studied institution	Exercise science
Graduate 4	Female	Undergrad and DPT residency program at studied institution DPT degree from other university	Neuroscience Took part in intensive integrated science/art course abroad

Although the interview participants had many diverse characteristics, several common themes emerged when discussing demographic and personal information. Eleven subjects explicitly referred to their love of reading or writing or discussed hobbies which involved the arts, such as playing a musical instrument or dancing. Eight spent time abroad, either as a student or as a resident. Eight identified that they had gone to a liberal arts school as an undergraduate student or had majored or minored in a humanities related field, including anthropology, art history, history, and dance. Six spoke directly about a personal medical crisis which impacted their perceptions about the human experience. All participants shared an interest in use of humanities in physical therapy education.

Humanities Defined

During the interviews, the participants' definition of the term "humanities" was established at an early point to create a foundation from which to move forward when asking more in-depth questions about humanities. Although humanities were described in a number of unique ways, phrases arose which were common to all respondents, with the most frequent being that humanities are anything that provide a better understanding of the "human experience" or the "human element" of being a healthcare practitioner or patient. Humanities were further defined as coursework or activities which enhance understanding of the "emotional side" or the "softer side" of life, "psychosocial factors," or the "human side behind the injury." Two respondents described use of the humanities as "taking a holistic approach to understanding people."

Respondents often defined humanities through the impact they have in the classroom. Humanities were described as teaching tools used to generate "empathy," "connection," "caring," and "morals." They make people "feel engaged" and "generate emotion." They provide "an

opportunity to see in a different way” and give “purpose and meaning” to information that otherwise might lack context. According to one recent graduate who is now a practicing clinician,

I would say it’s anything that generates emotion or gets to the bottom of someone’s thoughts, and insight into the clinical portion of what a DPT or PT is doing day to day. Understanding our surroundings, whether it’s healthcare, or colleagues, or family members going through health issues, caregiver burden can be an example, how we process that information, and what helps us get through that, whether it’s us within our struggle, or helping our patients find their way into a brighter moment where it doesn’t feel so dark, it doesn’t feel like as much of a struggle, and if we learn from it, that’s what I consider humanities.

Along with describing how humanities help clinicians to understand others, some participants discussed the self-awareness which humanities can create. One student explained that humanities impact “how we engage with our internal and external environment, so internally who am I, how do I identify myself and my body and in my mind, and what do I, what is the purpose in life for me, how do I derive meaning, what is autonomy to me?”

Respondents listed a number of different forms in which the humanities can be found. Many discussed art, music, dance, literature, poetry, as well as philosophy, sociology, history, and anthropology. One participant mentioned use of nature and natural phenomena. Two faculty members described humanities as patient stories and their journeys. Several respondents discussed humanities as being the intersection or interconnection between the arts and sciences, with one person describing it as a continuum. Humanities were also described as areas of study

that can't be quantified scientifically but are important for health care practitioners to understand. One faculty member explained,

So my approach is that when you're treating a human body, it's not just the physiological systems and the scientific systems that you're looking at. There are these other things that make a person that you can't quite quantify scientifically, but yet play an important role in a person's makeup and therefore their healing.

Some respondents talked about humanities having different and unique meanings for people due to their individual differences. One respondent noted, "Everyone has a different way of expressing themselves." Another stated that "what humanities means is recognizing that natural process for people to want to be creative, to want to be expressive, and to make it something that can be shared, so people can interact and all appreciate," and that "it does incorporate whatever is meaningful to that person in the way that they see things." Humanities were often cited as creating the opportunity for people to see in "a different way."

Participants answered a number of questions which were designed answer to the research questions. Interview protocols were used for each in a semi-structured manner, with a number of follow-up questions shaping the direction of the interviews based on participants' responses. The research questions and data collected to answer the questions are as follows:

Research Question One

Research Question One explored by which methods and in what content areas the humanities were being integrated into physical therapy curriculum. All interview subjects described use of humanities in a number of different forms throughout the physical therapy curriculum. According to one student, "In every class we took we would find some way to get to the humanities, whether we used the word humanities." Narrative, guest panels and speakers,

experiential learning, film and literature, and a university sponsored journal were all pedagogical tools discussed by participants which incorporate the humanities. Examples of use of the humanities in most major curricular areas were provided, including neurology, orthopedics, geriatrics, cardiopulmonary, acute care, anatomy, and ethics. Neurology was the most frequently mentioned course in which activities took place, and musculoskeletal was the least, but at least one activity was identified in all major content areas. Faculty identified a number of pedagogical approaches which they see as important in making the humanities accessible and relevant to students.

The definition of humanities was established and discussed early in the interviews, so subjects were able to provide examples which supported their interpretation of humanities. Although each subject named activities which may have stood out to them more based on their personal interests, the same experiences were addressed repeatedly through many interviews. Some examples of humanities were noted to be required classwork, while others were optional out of class activities.

Narrative

The most commonly cited use of humanities was the through the practice of narrative reflection. Narrative is a pedagogical tool which requires students to write a story about a clinical experience, reflecting on a situation and considering multiple perspectives (Greenfield et al., 2015). An important component of the physical therapy curriculum at this institution, narrative is introduced in the first year of studies. According to one faculty member, in the first year they “introduce [students] to the concept of reflective practice through the use of narrative, and how they’re going to start using narrative during their clinical experiences to capture the meaning of those experiences.” Another faculty member elaborated,

We would meet with the students and explain, especially in General Medicine- that's the first time- the purpose of the narrative, the Gibbs model, and then we give them examples of questions that they might ask themselves. We tell them that they could really write about anything they want, but those are just some guiding questions if they get stuck, and then they're supposed to write about that patient experience or that interaction or whatever. And then they come back from their internship and they've written the narrative, and then we meet in groups of eight, and they actually read their narratives to each other and we talk about them. So they do that in General Medicine, and then they do that again during the Musculoskeletal complex, which happens in the summer, and so at least there is some narrative component with what they do in that course.

Narrative is used later in the curriculum after the students complete their first long-term clinical experience, and again in the Advanced Neurology elective. A faculty member from the Advanced Neurology course explained, "They're required to write two narratives related to something that stuck with them from those experiences, so it could have been a patient encounter, or it could have been modeling for the good or the bad, patient interaction with a physician or prosthetist, or whatever..." Narrative is also used in the physical therapy residency programs offered by the institution.

When asked to describe how narrative relates to use of humanities, both students and faculty demonstrated understanding of the connection. Explaining how narrative falls under the umbrella of humanities, a graduate of the program offered,

I think the narrative process is a very reflective process, and so the critical thinking that you have to think about while you're writing, because basically a narrative is writing a

story, which is a type of literature. So I look at it as writing my own personal experience, my own personal story, back into what I perceived happened.

Another student stated,

When I spend some time with my computer screen trying to get something out, I would imagine the directors of different films where they are filming their family member or different families through the editing process, or through the filming process, you find some realities that you didn't know were there. Or while interviewing someone else, you find a reality that you didn't know was there. And I think with both of those, two pieces come together in making it so that the word gets out and your story gets out.

A faculty member provided further explanation to solidify the connection between narrative and humanities:

I think it's narratives and listening to stories and the power of stories- it's definitely part of liberal arts and humanities. It's tending to the individual, being mindful, being in the present, listening to the story, looking beyond the patient as object or diagnosis to the patient as person, learning to move beyond the traditional case history, to understand who this individual is and how the expectations, goals, needs, and values, fears of the individual... So I think from a humanities standpoint, it's bringing all those elements in, being better listeners, being more mindful, being empathetic, and being more aware that you're dealing with a human being, and that is a difference between illness and disease, and what does that experience like, and how is your understanding of that experience going to impact your care?

Similar to narratives, another pedagogical tool is the use of online discussion boards to explore what are identified by faculty as "difficult conversations." The neurologic faculty created

three scenarios on which they ask students to reflect and write about how they would approach the situations. The last of the three assignments challenges students to recognize and discuss their personal biases and the potential effects they create. One of the faculty explained, “And so maybe people have ideas about how to let go of some of those kinds of things, and so it’s been really interesting watching the students share different ideas and saying, ‘Oh, I have the same bias. This is what I try to do when I’m out in clinic.’” Faculty explained that much like the narratives, the discussion boards create a situation which encourages students to reflect on and discuss the human experience.

Guest Panels and Speakers

The second most mentioned use of humanities by students and faculty was the inclusion of guest panels or guest speakers. Faculty invite former clients or members of the community to come in and share their stories with the class. Dialogue is intentionally steered in a way to capture a deeper understanding of patient and caregiver experience. A faculty member described the panel included in her neurology course:

...a session that we have at the very beginning of the course called the Quality of Life Panel. So what we do is invite patients, and most of them are chronic and have been dealing with their issues for a long time, so the person who’s primarily affected by the diagnosis, and a partner of some sort, so either a caregiver or a family member or someone that’s close to them, to accompany them and talk about navigating through the illness and everything that goes with it and how that has impacted them. And beyond setting the stage for who’s invited, we don’t give a lot to the students. We tell them to ask questions, to explore these topics from a personal perspective. How this has been for them, right? And so we really don’t guide the questioning a lot. We also had someone

from disability studies come this time, we have a neuropsychologist that comes, and we have a couple of physical therapists who are particularly interested in humanities come. So, we sort of facilitate the conversation, so if a question would need more development, we can sort of add from an academic perspective. But it's really about the patients and caregivers interfacing with the students.

One student described interacting with the panel as a “really impactful moment “ and another explained, “We got to physically see what these people’s lives were and their daily challenges to a degree, but we also go to talk to them and ask about it and have a conversation, and that very literally I think embodies that humanities component.” One current student described the unique perspective that the panel provided:

It was a very interesting experience that sometimes gets neglected when you're just so focused on learning material and learning how to treat these people once they get into your clinic that we forget... that every back has a front. And so you kind of have to, you can't appropriately treat somebody if you don't understand the social aspects or what's going on emotionally and psychologically with them as a person, because who cares if you can help them get out of bed if you're not going to be sympathetic to them when they're trying to tell you how they're scared because they're not going to be able to go back to work. So, it was a great experience to hear from all these different people- the pros and the cons, the highs and the lows of their experiences with their neurological diagnosis. That was probably one of the most impactful experiences that I have had.

In addition to the panel, individuals with various health conditions are brought in during specific units to aid students in understanding their pathology and associated difficulties.

According to one student, the individuals “talked about living with that disease or that condition

and how it influenced their life, how it really impacted what they wanted to do. So those individuals talking about how their disability limited their function, I thought was very impactful and powerful.” Another student commented on the effectiveness of learning from the words of a real individual with a “lived experience” as opposed to watching a video or writing a reflection, stating that it left a much bigger impact. Faculty agreed that having guests come into the classroom can be extremely valuable. One faculty member observed, “I think when you incorporate that, the human side of it, I think you get to see the students do self-assessment. They may not know they're doing it, but when you watch them mature over the three years, you can really see that it's been grounded into them.”

Service of Gratitude

Another humanities-based activity frequently mentioned by students and faculty is the Service of Gratitude, an event held at the beginning of fall semester in the first year of studies as a way to memorialize and thank those who donated their bodies to be used in the cadaver lab in summer Anatomy. As explained by the physical therapy program director:

...what I tell students is that sometimes when you get in Anatomy lab, you can get so mechanical and clinical and scientific when you see that body, and you even forget that there's a person there. And I do not want them to lose the humanistic aspect, and so this is sort of a way of reminding them. It's called Service of Gratitude because these people made anonymous donations because they cared about medical science, right? And so it's a time for them to sort of reflect on what an incredible gift they got. Not many people on the street have looked inside the human body the way that they've been able to do it, and I want them to appreciate that, so we have this service. It's not a somber, somber service, it's a respectful service, but it's also a celebration of the gift they gave. So students share

reflections. People have read their own poems. People have read excerpts about things that have moved them. So we just found that aspect of what these donations are, so we can give a perspective to the science that we've learned through these bodies.

Students are required to attend the service, but higher levels of participation in the service are optional. Each first-year physical therapy class is charged with planning the program, and “students can choose to donate their time or volunteer in the service.” Two students reported singing or playing a musical instrument. Others discussed their classmates reading poetry or creating art for the service. Every year the experience is unique based on the contributions of the class who planned it. One student described the impact of the service, saying, “It helps us to keep that in mind- these people are part of our journey.”

Experiential Learning

Students and faculty referred to several different experiential learning experiences as a form of humanities integration in the curriculum. In these activities, students go out in the community to provide service or to spend time with community members outside of the academic setting. One example was the “Senior Mentoring” program. In this activity, physical therapy students were paired with other health profession students from the university to meet with a senior citizen from the local community. The meetings occurred once a month over the course of a year, with the students and their senior mentor discussing assigned topics. One student commented, “After that I felt like it's [easier] to talk with people like elderly patients than I felt like people my age or middle age.”

Another experiential learning activity described was providing pro bono physical therapy to migrant farm workers. As explained by one student,

...you're doing PT interventions and interacting with migrant farm workers, and just taking that experience and being able to reflect back on it was just pretty neat, because you're in this rural setting, and you have limited interventions that you can piece together and really get to know their story... It was more of the reflective process because of the scenario I was in, that I felt I was really able to apply the humanities.

A third experiential learning activity discussed was a service trip over spring break to Jamaica. The trip is embedded within an elective and involves a smaller number of students as a result. According to the faculty member who coordinates the trip, one written narrative from the experience is required, and two other reflection pieces must be created using any form of expression, from written narratives or poetry to photography and painting. A student discussed the value of the trip, stating, "It was a great opportunity in the sense where you were embedded into this community and culture and needed to implement their culture into your treatment ideas, your home exercise programs, or modifications for their lifestyle. And again, you were instructed to do reflective practice, or you could do art or photography, something meaningful from us."

Film, Literature, and Fine Arts

The use of traditional humanities forms such as literature, film, and fine art were frequently mentioned, although faculty stated that they don't use these tools as often as they would like to due to time constraints. One class in which literature is used more heavily is Ethics, where the professor does "bring in allusions to liberal arts works, philosophy, fiction that can reinforce the discussions that we're having." A student talked about watching a film in one of her neurology classes, stating, "... I didn't have much exposure to patients with different neurological conditions-this was before clinical rotations- so it just gave me a better idea of what challenges a person with MS (Multiple Sclerosis) might have on a day-to-day basis that I need to keep in

mind as a physical therapist.” The neurology faculty reported recently cutting some films out of their course due to needing to make room for other material, but stated that they provide the students with a resource list of books and movies that they “have found particularly impactful.” A student acknowledged that literature and film are suggested to them at times, explaining, “There's a few professors who recommend certain movies, and I've had clinical instructors do that- they might say you should watch this movie, read this book, so it kind of pops up more sporadically then in various classes.”

Because of the time constraints in class, some students have taken the initiative to host out of class optional activities in which films are watched as a group. One student described such an event when asked to name a memorable moment when the humanities were used:

Definitely watching one of those films with the class was one of those moments. We had a pizza party and watched it through two lunch breaks. I would say 95% of the class was present. Within my group of friends that I sit close to, we definitely still discussed it for several days to come after that. Or sometimes we would make reference to it later on in the lectures, so that definitely was a big part of, that was definitely something memorable.

Another student spoke of the impact of a film night that he was instrumental in planning:

...no one except myself and a few of the others knew the film we were going to watch, and everyone kind of went in there with an open mind, and out of it came a really great conversation, and people who I know are going to be great clinicians in the future, really coming out of it and still saying, ‘Wow, that really impacted me more than I thought, you know than anything else I’ve ever done before.’ So just to be able to see that I could in that small way have that effect on people and draw... this was before any of us had

started our neuro portion and it didn't require a whole lot of prerequisite understanding... it still engaged people and got people thinking and being creative, and realizing certain lessons that you can't always learn in the same way in a classroom that aren't always as salient, that don't stay with you as long.

A second student spoke of the same film night, talking about the value of attending:

It was really interesting, and really supplemented the material we were learning in General Medical, because we were able to talk about line and tubes and patients sitting in bed and how it's so hard for us to do sometimes one or two hours of these patients because they're just so tired in the ICU and all these things, and then watching the video they had this one part where you just saw the ceiling over and over and over again and that's because it's what the gentleman saw everyday was just the ceiling, the ceiling, the ceiling, and it really drove home the concepts we were learning about in General Medical about how important we are to the patient, to the rehab, because we change that perspective for them from looking at the ceiling all the time, hearing the beeping, maybe hearing things going on, and maybe people really don't even know they're responsive, but just talk about them over them, and you can change that perspective, and bring them on eye level, and we can improve their quality of life while they're still in this unfortunate circumstance. It really helped to drive home those concepts and give them meaning because sometimes when you're learning about the pharmacology of medicine and all these things you can lose touch, so it's really important to have that experience in order to ground it all again.

Other optional activities incorporating fine arts were both discussed and explored through flyers and publications, including an evening event at the university's art museum where

photographs by a physician and art from the museum's collection were juxtaposed and discussed. These activities were not specific to the department of physical therapy but represented activities in which the DPT students had the opportunity to take part.

Online Journal

One unique way in which humanities are present in the program is through an online, open access, peer-reviewed journal produced and supported by the Division of Physical Therapy. This journal, which features stories, poems, photography, and other mediums, is focused on the intersection of humanities and rehabilitation. The journal was first published in 2015. The program director described how the journal was started:

...that whole thing started because actually ACAPT (American Council of Academic Physical Therapy), there's one person on the board of directors at ACAPT... who really wanted a journal of humanities in rehabilitation, and he prepared the proposal and made a pitch to the ACAPT board of directors. But they decided not to do it, because they wanted to focus on something else. I was on the board, and I came to our faculty and said, you know we can do this... And you see how creative my faculty is... they are just go-getters, and so [name] found out we had some money from the Mellon Foundation, there was a grant that the Mellon Foundation that was given to the library, so they had some money that they said could get us started on this online journal, so we got it started, but then after that, I funded it from my budget. And so I go to the Dean every year and I tell him this is a journal that we need to support, and it's an important thing. It gets our name out, and I've supported it.

Students are given the opportunity to submit work to the journal, and a few are awarded work-study positions to help with the production. All students are encouraged to read the journal

through e-mail notifications when new issues come out, but several of the students interviewed expressed that they feel the journal is underutilized by their classmates. One student said, “It's my hope that maybe when students are on clinicals and have less required reading, or when they graduate, they can read a little bit more, because it is a valuable resource.” The students interviewed are enthusiastic supporters of the journal and have been involved with it in various ways. One student explained, “And I have to be involved, because I can see the impact that things like this are making in our education and how it can make an impact for other people as well if they see the journal, if they read the journal, if they're involved at all, it can just spread.” A graduate of the program who has written for the journal stated, “It's one of those things where you just develop so much empathy, just different perspectives and different ways to approach a problem, or different insights into patients with disability. So, think it's incredibly important.” One student discussed the profound impact that the journal has on her:

I think it reminds me of why I want to be a PT and how deeply you can touch other people's lives and interact with them and help them along their journey. A lot of the pieces that I remembered just kind of stuck with me or resonated. And it even makes me think differently about the patients I've have been in contact with thus far just on clinicals, and how I'll just hopefully think of those perspectives a little differently as I practice.

A second student discussed the meaning of the journal to him:

I had a pretty emotional experience to what I saw in the journal's mission and some of the reflections of patients and things I read. I felt that I could see my own story within that, and even still, different stories I've been working on, it's hard not to feel a personal connection to that, and you realize how powerful it is just to be able to express your own

story. And I think with the element of being able to express your own story and having the tools to do that is an amazing thing, that potentially it started for me right there, just being able to cultivate those tools of knowing how, like with the writing, just getting out there and doing that set me up to be able to do that here as well.

Discussing the important role that she feels the journal can play in the profession, another student added:

I think the journal could be a way to legitimize the importance of humanities in PT education. I think the fact that it's also exclusively online is an important aspect to that, and I think it's hopefully going to encourage more people- it's online and open access- so I would hope that that would decrease the barrier for people to want to explore a topic such as this, but I see it as, seeing that you're doing your research on this area, and we're trying to do this work here, that hopefully it will contribute to the legitimacy of the importance of why the humanities is needed in not just PT education but medical education.

One graduate spoke of the perspective gained from reading the journal, saying,

It gives me different insight and different perspective of how to approach a problem, especially reading the patient section. There was a gentleman that wrote a poem called *Ode to a Stroke*, I think published two years ago, where he was talking about his experience going through a stroke, because I have never lived through that, so the journal gives me more insight, more tools to be able to better connect and be more empathetic towards my patient, because I'm healthy, I don't have a neurologic injury, I don't have any vestibular injury, I don't have any other crisis. But exposing myself to literature or their reflective narratives gives me better insight.

Through narrative reflection, guest speakers, experiential learning, film, literature, and the arts, and the online journal, humanities are delivered to students in a variety of ways. Faculty acknowledged, however, that the presence of the humanities alone is not enough to create impact. Faculty explained that they must use pedagogical approaches aimed at making the humanities meaningful and applicable to students.

Pedagogical Approaches

In addition to explaining the specific ways in which humanities are used in the curriculum, a number of faculty identified the pedagogical approaches used to make humanities integration more effective. Pedagogical methods discussed included repeated exposure to the humanities, explicit connection to the benefits, attention to making humanities relevant, and keeping it simple and sensitive to time constraints.

Faculty and graduates both stressed the importance of weaving humanities throughout coursework so that students are exposed to them many times. One graduate stated,

...I think repeated exposure helps. Because the first time you start with doing reflective narrative, I know, I personally was really skeptical, you know. I don't like writing my feelings down in journals, I don't like thinking back. But I think anything the more you do it, the more accustomed you become to it, and the more open you become, which I think has made me a better PT, one because I am able to quickly reflect back on my past experiences and learn from those lessons, but then I am more open and able to identify things I might not have if I didn't have that reflective component.

Along with the importance of creating repeated experiences with humanities, another faculty member discussed the importance of explicitly telling students how humanities exposure benefits them:

I think just repetitive exposure, and really trying to showcase the importance of the humanities, so rather than just giving an assignment and saying, 'I would like you to reflect on this assignment,' explaining the importance of it. I think students would have a better understanding and have a better concept of going through the activity and a better understanding of why the humanities are important, why they would use it in their clinical practice, and why it will benefit them in the future.

Continuing this theme, a faculty member stated, "So the key is to keep talking about the humanities and how it impacts patient care, and how it can foster better understanding of the illness experience." Speaking about introducing the use of narrative, one faculty member emphasized, "You have to get them to understand why it's so important and give them examples and show them evidence." Another added, "So I think it's framing it well, messaging it well, having appropriate objectives, and then designing it in a way that is effective and occurs at the right time and in the right places."

Faculty discussed the importance of purposively making the humanities relevant to the students, realizing their needs will change as they proceed through the program. One senior faculty member highlighted the importance of recognizing where students are in their understanding of the complexities of the profession to give relevance to the humanities:

Now as they start learning about ethics, professionalism, and interprofessional communication, they do begin to appreciate that more and more as they work with simulated patients and start getting into the clinic, they do begin to recognize the types of issues that arise related to the human element of practice. But in the beginning they don't, so you have to use it in the way that makes sense to them, and fits into the overall philosophy of the course and what you're trying to do... I do find that when you

judiciously reference certain works of literature, literary works and philosophies, if you do it in a way that's really linked to the point you're making, I think it resonates, I really do...

Another faculty member stressed that if the humanities are made “understandable to [students] and how it really relates to clinical care, then I think it will resonate.” Speaking about the importance of giving meaning to humanities activities, one person suggested:

I think connecting to outcomes- how do we help them see that it really is connected to these other types of competencies or skill sets that they have, like a joint manipulation, which is very tangible, how do you get, how do you make case scenarios in thinking, how do you provoke certain types of thinking, with hopes that they'll link together, well do you know what, that joint [mobilization] may not be enough if you didn't ask the right questions and listen in a way that informed your way of thinking about how they got to where they did.

Some suggested keeping it simple when incorporating humanities and being mindful of how much time humanities integration is taking up. One person suggested, “So I think maybe just adding it in small doses with consideration to what class, I think, and the overall time demands of the on the students.” Another added, “Keep it down to earth, but still incorporated in the class. Keep it very simple. Have students have the mindset that you're practicing treating humans, not just patients.” One faculty member discussed how she incorporates the humanities in small ways:

So I tried to have a thread of a humanitarian focus and the psychosocial focus throughout my neuro courses, because I feel like with every neurological diagnosis there's a little bit of a different consideration from that realm. So I just always focused on in my lectures

the importance of patient-centered dialogue, of communicating with the family, of motivational strategies like motivational interviewing and empathy, and that was incorporated into my neurological courses a lot... And then I just tried to talk, too, about not just the intervention or not just the evaluation, but how specific interventions and how intervention planning within the neurologic population can really drive self-efficacy.

The same faculty member later continued:

I try to make humanities as relatable as possible by telling either a personal story where it benefited me as a clinician to have this perspective. I try to tell them anecdotes of when I was challenged as a clinician and how I felt like the humanities piece played a huge role in how I overcame that challenge, so I try to make it really relatable. I try to have them come up with examples and give them space to talk about examples in their lives, and sometimes I think that even if that particular student isn't going to be open and share their experiences, I think hearing other students share their experiences helps keep the dialogue going and keep the door open. I try to make it as relatable as possible, and I try not to be super focused on 'this is just a neurologic area' because I have students that want to be Sports Rehab specialists or not work with the neurologic patients ever, and so I try to spread it out so it covers kind of all areas, so that they don't feel that I'm just kind of speaking to one particular subset, I try to make it about the human experience, and I try to remind my students, too, in any context, that we will all have a disability, we will all be a participant in this minority at some point, we all will be here, and so will your family members, and so will your loved ones, and so it behooves you to care about this aspect, whether you understand it or not, and whether you relate it to it yet or not, at some point you will, so I just trying to drive home that is really personal experience.

In summary, the humanities are used throughout the curriculum at the studied institution in a variety of ways. Narrative reflection, guest speakers, experiential learning, film, literature, and fine arts, and a journal focused on the intersection of humanities and rehabilitation science are all tools used to integrate humanities into the curriculum. Faculty recognized that to make humanities integration effective, repeated exposure, explicit connection to the benefits, attention to making it relevant, and keeping it simple and sensitive to time constraints are all pedagogical approaches which should be considered. How the humanities are used may have significant impact on attitudes and perceptions, a topic discussed in Research Question 2.

Research Question Two

The second research question explored the attitudes and perceptions of faculty and students regarding the use of humanities. Interview participants described a broad spectrum of attitudes towards the humanities, speaking about their own feelings, as well as the perceived attitudes of others. All agreed that there are students who embrace humanities from the start, students who resist initially but gain appreciation as they progress through the coursework, and students who never become receptive to the value of humanities. Most participants felt that faculty universally were supportive of humanities to some degree, although one student mentioned that a few faculty members did not seem to embrace the humanities as much as others.

Student Attitudes

All students interviewed were supportive of humanities being used in their education, but some admitted that they did not feel enthusiasm for humanities at the first exposure. One student who was initially uncertain of the value of humanities said, “At first I was like, ‘Oh, why do we have to do this?’ But then once I got to do it, I [found] it’s pretty interesting.” He continued,

I think most people feel the same way I do- the first time they saw this as extra stress, but when they really sit down and we do the reflection together, everybody is just like, 'I want to talk about my patient,' and you usually run out of time. But when you really get to do it, you find it's very beneficial and interesting.

Another discussed the way student attitudes evolved:

I think with the reflective narratives, that has been overall positive. It's taken people time to adjust, and I think some it comes from just the way that it's sort of an afterthought, it's something we go through our whole semester, then we're out on clinic, then after that, the last thing left, the last thing between you and the time to recuperate and come back is your narrative reflective group meetings. It works quite well. I think it's a good time because people- it's fun just to hear people's stories, and I think it's been really impactful for people to see the thoughtfulness of our different classmates which we don't always get to see, don't always get to showcase, and you're also getting to hear different takes on things, which has also been really helpful, too. You always get surprised by how someone interpreted something or approached it, and so there is definitely a learning component to it there, and the only thing I would say is kind of lacking is that it's an afterthought, it's the last thing you do, and so in some way if it could be more interwoven in...

One student expressed that the best way to impact students' attitudes towards the humanities is to let them go through the process:

It's one thing to tell people that this is important, and at a certain point you don't have to tell them anymore, you just have to allow them to experience it and see it, and I think that's what it does, it takes what we already know is important and allows us to see that,

and then energizes us in a way that you can't by just being told over and over and over that this is important.

Interview participants acknowledged that there were some classmates who did not find value in humanities activities, even after completing the coursework. One student stated, "I had some peers that would roll their eyes and say, 'This was not worth it. Reading the reflective narrative was not a good use of my time.'" Another reflected on the reason why some classmates don't appreciate humanities, stating,

I think sometimes people are so concerned about like maybe themselves and their debts and things like that they are not able to fully understand the impact that their knowledge, that it's just such a blessing that they can change people's lives, so it's more about how can I do what I want to do, not how can I best serve the people I'm going to be treating in the future in order to make their lives better, and it's a different perspective, people go into different jobs for different reasons, so...

Trying to give an alternate perspective to classmates' perceptions, the same student continued, Sometimes they've known, maybe their entire life, what they want to do, and they're not easily swayed, which is good. It must mean that they're very passionate. But sometimes they're so looking towards a direct point they already have placed in their timeline in the future that they're not seeing the potential paths along the side they could go down and still get to the same generalized point, but maybe with a different perspective or a different view or approaching it from a different way.

One student talked about the benefit of exposure to humanities for students who aren't necessarily receptive, saying, "I think being a good PT is getting out of your comfort zone, and I

learned a lot from my professors who do that themselves and push us every day to do it in class as well as on the rotations.”

A graduate reflected on other healthcare students who participated in an intensive integrated humanities experience as an optional activity and did not value it the way she did:

...does that mean that there's something different about them than there is about me, or does it mean that they're not in a place to be open and receptive to that? Or does it mean they don't have a relationship enough with themselves to be able to experience that? I'm interested in that piece of it, too... do you have to have a certain amount of self-awareness and curiosity and interest to be receptive and really be able to engage in these types of discussions and experiences, and I don't know how you necessarily quantify that, but maybe there's some seeds planted that might grow later, or maybe to be able to look back later and realize what an amazing experience that was, so yeah, it's hard to know.

Faculty discussed seeing a spectrum of student responses to use of humanities in their courses and agreed that the majority of students seem to be receptive over time. One faculty member noted many positive responses early on, stating, “I can definitely say that there are some that seemed ignited by it fairly quickly.” Another faculty member acknowledged how receptive students are, saying, “I'm surprised sometimes at how it resonates with some students who I don't expect it to resonate with.”

Faculty also discussed the growth in students over time regarding their attitude towards the humanities. According to one faculty member, “I think it changes as they go throughout the curriculum. I think in General Medical it's just one more assignment and ‘oh, here we go...,’ and it may seem a little hokey, but they don't really understand the full breadth of why they're doing it.” Describing the response to a humanities-based project within her course, a faculty member

said, “So after the experience, I know that there were a lot of people who definitely thought, ‘Oh, wow, this is way more important and interesting, impactful and cool, than I thought it was going to be.’” One faculty member described the growth she sees in students, stating:

Their first class in the curriculum, one of the first classes in the first semester with anatomy and things like that, is interpersonal communication, and they're all just like ‘we don't need this, we all know how to communicate with each other,’ and they all grumble about it the whole time even though they love the instructor, and then they get to the end of their clinicals and they're like, ‘Wow, that interpersonal communication class was really important.’ So I think it gets them there sooner, then they appreciate it later.

Faculty universally agreed that students appreciate humanities much more in hindsight than while they are completing their coursework. One participant said, “By the end of the time that they do the exit interviews I think they appreciate it, so I definitely think it's a growing process of understanding for them.” Another agreed that the impact of humanities is not fully recognized until after graduation:

I do have people come back to me in a year or two and say, ‘You know at the time we were doing it I didn't appreciate how much this was preparing me, but when I got out of the clinic, I was so glad we had done that, because you know, I had that situation come up, and I at least felt like I had a direction to take.’ So I get a lot of, you know, of that kind of thing, but in the moment, you know, it's just like one more thing to do instead of embracing it and appreciating what it's about.

Appreciation for humanities in hindsight was echoed by another faculty member who said,

I think I definitely see a change in them over time. I've had students reach back out to me, even since I left the university I was at, to say, ‘You know, you had such an impact on the

way I talk to patients, the way I perceive patients that I'm working with,' so I do find that even if they don't understand at the time, after the experience or after the assignment is over, that a lot of students do come around.

Faculty also discussed students who are never receptive, stating that there typically are a few members of the cohort who do not show interest or take humanities assignments seriously. One faculty member speculated,

...I think they sort of just assign that to the category of soft skills. Or they don't see it as something that they have to learn; they don't understand the nuance of something even like active listening. Or they approach it as just another 'how am I going to make the right grade on this'- that kind of thing... And then there are people who are just really uncomfortable with it, either they don't think that soft skills are that important- I'm only using the term soft skills because that's what people call it- or they think it's just a waste of time.

Despite having some students who do not embrace the humanities, faculty reported that the overall response to the humanities is positive. Faculty acknowledged that many students appreciate humanities at a higher level after they are out of the classroom and in the clinic, a perception that is echoed by graduates of the program.

Graduate Attitudes

Graduates of the program expressed views reflecting the perspective of someone looking back at their recent educational experience after having gained experience working as clinicians. Some described enthusiasm for humanities from the start of physical therapy school, while others admitted that their interest developed over time. One graduate explained that she liked using narratives throughout the program, stating, "I've always thought that it was a really eloquent way

to kind of put into words what my patients are experiencing, what I was experiencing, so it's always been important to me.” Another stated, “I think it's one of those topics that you get what you put into it, and if you sort of drop the act and just really embrace that experience, it can be really moving.” Discussing the evolution of her attitude towards the use of narrative, one graduate stated,

Because the first time you start with doing reflective narrative, I know, I personally was really skeptical, you know. I don't like writing my feelings down in journals, I don't like thinking back. But I think anything, the more you do it, the more accustomed you become to it, and the more open you become, which I think has made me a better PT, one because I am able to quickly reflect back on my past experiences and learn from those lessons, but then I am more open and able to identify things I might not have if I didn't have that reflective component.

Reflecting on the attitudes of her classmates, a graduate talked extensively about the challenge of some students not seeing the value in the humanities and therefore not engaging in a way that made humanities meaningful. She explained:

I think a lot of people go into it with a mental block that this isn't really important, and then they're not receptive, not because of how [the faculty is] approaching it, but because of their preconceived notions of its value in the grand scheme. If you have a hundred things to do, and if you have to go to communications class, then it goes lower on the priority list and you're going to do other work while you're in that class, so you're not going to be as present... But I think probably after they graduated they wished that they had put a little more effort into that sort of experience.

Continuing, she said,

And I think that it's not something that can be forced. I don't think you can make people do humanities. You can make people take classes in humanities, but their level of engagement depends on where they are in their life and things like that, and showing a wide variety of people that are engaging with the humanities in different ways, and showing that there are different ways to engage with that, and thinking about what the purpose is. And a huge step back, ten years down the line kind of thing, and when you have that patient or that experience that you need to draw from this sort of thing, of building your emotional reserves and getting in touch with who you are as a person... I vividly remember PT school, how difficult this course was for some of my classmates, and I was looking forward to it, and other people were dreading it, and having conversations with my professor about it, and her sort of saying 'I just don't know how to make it is important to everyone as orthopedics, and I feel like I'm just preaching to the choir.' The people who are really loving it and really engaging in it don't really necessarily even need those experiences as much or don't have to be shown how to have them as much because they're already doing it.

Although the response to humanities is not positive among all members of a cohort, graduates agreed that continued humanities integration is very important in physical therapy education. Graduate support of the humanities echoed the sentiment of interviewed faculty, who firmly believe that humanities belong in physical therapy education.

Faculty Attitudes

All faculty who participated in the interviews described themselves as strong proponents of the humanities. Several faculty were credited with having started the movement towards humanities integration within the department, and others reported having grown under their

mentorship. All were very supportive of humanities being an integral part of physical therapy education. One senior faculty member explained,

I think it's intuitive the humanities fit, because basically PT, like all healthcare, is a relational practice, and when we're dealing with healthcare we're dealing with human beings. And if we're dealing with human beings, we need to understand human nature and the issues that arise in human care. So it seems to me that it's not a luxury, it's part of best practice. And I try to make that point over and over again, that if you love health care, for the most part, you have to really love humanity, to a certain extent. But there are exceptions- that people go into health care and don't particularly like people. But I think that PTs in general are people persons.

A new adjunct faculty member who is also a graduate of the program talked about the value of humanities for all students:

I was reading an interesting article... they had med students analyze a piece of art and what they found was that individuals analyzing the art were better able to communicate with their patients during a subjective interview. So I do think you pick up different skills and different abilities to pick up small details by bringing the humanities through. And at the end of the day you're going to be speaking and communicating and connecting to people regardless of if you're in a neuro setting or an outpatient ortho setting. So having those skills that foster communication, that foster patient interaction, that foster critical thinking is key, regardless of what section you're in.

Students, graduates, and faculty all have positive attitudes about the use of humanities in physical therapy curricula. However, there was acknowledgement of an imbalance in how humanities are used throughout varying content areas and mild disagreement regarding how even

the distribution should be. The next section will discuss attitudes pertaining to where humanities should be used in physical therapy curricula.

Attitudes Regarding Humanities' Place in Curricula

Most faculty, students, and graduates agreed that humanities should be included across the curriculum in all content areas. One new faculty member who is also a graduate of the program talked about her commitment to integrating humanities in her classes, even content areas that don't lend themselves as easily to humanities, stating:

...just continuing to have that thread of 'this is a person- I know you're testing a muscle but the muscle is on a person'- so thinking about draping and positioning and how certain individuals might be more sensitive to you exposing an the area of their body, and why that might be a kind of... so I see opportunities to bring it in, even if it's more at a conversational level, but I find even just a moment of mindful conversation, or a moment of phrasing something differently, like why would a patient not want you to look at their back, or why would a patient not want you to lift up their pant leg, think about it, why wouldn't they?

Musculoskeletal/Orthopedics was cited as the class in which humanities are used the least at the university, with opinions about how much humanities should be added varying. All faculty voiced the importance of increasing the presence of humanities throughout the coursework. As one faculty member said, "There should be these threads that integrate ideas [about humanities] throughout every clinical course that you take." However, students expressed a mixed response concerning humanities in their Musculoskeletal course. One student in favor of it said,

Should we not talk about the ACL patient who ends up with something terrible happening and then they can no longer do their sport, or the person who went in for a simple knee

replacement and next thing you know they have to get an amputation because of a really terrible infection? Because why should we not talk about the more severe and less common cases that are still more common than we would like to admit?

But students who were less in favor primarily cited the amount of orthopedic content to be learned as their biggest concern. One student wary of increasing humanities in Musculoskeletal said, “We didn't do any reflections or humanities parts in the MSK class, because I think that class is pretty stressful, and there's a lot of things we need to learn... and I still find time is an issue for me.” A second student agreed that the amount of content taught in Musculoskeletal is the reason there is no room for humanities integration. One student had mixed feelings, stating that whether or not the addition of humanities would be positively accepted [in courses where humanities use is not well developed] depended on if there were other issues with the class that needed to be fixed and should be considered a priority.

In summary, the interviews revealed positive attitudes towards humanities among all participants, although for some it was described as evolved from their first exposure. Some students suggested that attitudes and perceptions towards humanities in physical therapy coursework may be influenced and changed after experiencing the impact of the use of humanities. The next research question will address the outcomes targeted through humanities use and how their effectiveness is measured or demonstrated.

Research Question Three

The third research question explored the expected outcomes of humanities integration and how they are assessed. Faculty, students, and graduates identified a number of reasons for integrating the humanities into coursework. Each group provided a unique perspective but all touched upon the same themes as will be discussed in this section. Responses tended to be less

focused on naming concrete outcomes and more centered on bigger picture benefits. A humanistic approach to care, development of “soft skills,” formation of professional identity, development of reflective practice, cultivation of well-rounded students, and creation of transformative moments were themes most often addressed.

Humanistic Approach to Care

Frequently stated was that humanities create an emphasis on a humanistic approach to patient care, described by some as “patient-centered.” As stated by a faculty member, “you want your students to understand that you're treating not just the injury, but the person.” Another said, “I think one of the downsides or the faults of being in a very scientific-oriented field is that we don't always acknowledge or appropriately recognize the human experience behind, or I should say in front of the injury, because it's integrated within.” One senior faculty member explained why he chooses to make humanities an integral part of his teaching:

After years of practice, I began to perceive that it was the relationship between the healthcare practitioner and the patient and their family that had a tremendous impact on outcomes, and so it was sort of those psychosocial issues that began to appeal to me beyond the basic technical types of things that I learned to do, and it was the way that we ethically engage with patients and the judgments that we're constantly making that really began to resonate with me. And I began to really appreciate the relational aspect of practice.

He then reflected on the words of an experienced clinician who he once interviewed for a research project:

He said to me, ‘Now [name], there is a certain point my skills are maxed out.’ And he has really high-level skills. ‘But I noticed that my patients keep getting better and better

outcomes. It's not the skills anymore, it's the way I communicate with my patients.' And it was anecdotal, but it really resonated with me. He learned, began to appreciate, that there's a relational aspect of practice that kept improving and changing beyond his technical skills, the rational skills.

Continuing to discuss the role of the humanities when educating students, the faculty member said,

I don't know how you can talk about being a healthcare provider without talking about the humanities. It makes no sense to me, because that's what we do. And I don't think you can do one without having some exposure to the other. There's a real connection there, because we want to be humane healthcare practitioners. The goal of healthcare is to make a caring response and what does that mean? Well, part of it means understanding the person as a human being and understanding his illness script and fears and expectations, you know. If you don't understand that...

The connection formed with patients by using a humanistic approach to care was frequently mentioned. A faculty member reflected on the way in which the humanities help to build the patient/practitioner connection:

Why I think humanities are so important, if I could say in a nutshell, it expands the therapeutic relationship. I think therapeutic relationships can become very, very narrow. They can become about me as the clinician reading your chart, seeing that A, B & C happened to you, or you have a diagnosis with these symptoms, and you come in and I check off my list of things I have to ask you: how many stairs do you have, who's there to help you, and even what your goals are, which are important. But when it becomes a task, when it becomes this check-off sheet and immediately starts to put up walls between the

truly helpful expansiveness when you're trying to help someone and serve as a PT... And so how I think humanities can help is [to] remove this concept of a checklist, and instead of a set of diagnoses and symptoms and impairments, and then these are the things we have to do and these are the things that you have to do, it's very linear, and I think that linear approach sterilizes things too much.

All participants echoed the importance of using humanities to keep the “human” in healthcare.

Describing the importance of helping students to understand the impact of a humanistic approach, another faculty member offered,

And then it's us clinicians who have faltered in some ways if we're the type of clinician who feels like it's just diagnosis, impairment, goals, and interventions- 'you do this, you do what I say you should do, and then you will get some degree better,' and that's it. That linear way of thinking is too narrow and it just doesn't get the job done. I think that patients and clients get it, and I think students come in and need that kind of mentorship to understand how you deliver compassionate competent care. Some students, it's all about compassion- 'well, if I just sit there and listen to them, then I've done a good job.' But no, that's not quite it. Or it doesn't matter what we talk about, or what their story is, or why they're angry, or why they won't do anything, it's more about just that I need to be able to diagnose them and give the right intervention, but it's neither of those in isolation. You have to be able to bring compassion and confidence to deliver a service that I think will be successful And that has to be wrapped in humanity; I think there's no way to do it otherwise.

Students voiced appreciation for how the humanities help to keep their focus on the person behind the diagnosis. One student stated, “Any kind of humanities thrown into that

curriculum that would definitely bring you back more to the human side of things when you get lost in the clinical side of it,” while another explained how humanities help to provide perspective and awareness of the bigger picture of patient care:

I think it encourages us as students- just looking at the patient as a whole, especially as new clinicians, as people just acquiring our clinical skills, we’re often bogged down by special tests or what are we seeing clinically, but we don't stop to look at the bigger picture, and so I think by having movie screenings or doing the reflections, it's giving us a time to pause and think about besides how the clinical presentation is happening, what else should I consider when treating a patient like this?

Another student discussed how humanities help to keep the emphasis on patient-centered care:

And we talk about how to make it more patient-centered all the time; it's how we approach everything in our curriculum here at [school], but sometimes it can be easy to lose touch with certain things like that, or it can be easy to not fully understand... And so, when you have these opportunities to combine the humanities with the scientific knowledge that we already have, it supplements that knowledge and gives you so much more room for empathy, understanding, and being passionate and things like that, and fighting for your patients because you have a deeper understanding, more so than just the scientific diagnosis.

Explaining the importance of developing an empathetic, patient- centered perspective, another student added,

I think PTs, we have that wonderful opportunity in order to be more than that because we have the gift of time, which is not a lot of medical professionals are given considering the health care climate as it is now with reimbursement, and so because we have that gift of

time to spend with our patients, it is that much more important that we have the empathetic and understanding perspective in order to use with that, and we have as much encouragement to step away from that diagnosis-centered or treatment-centered approach and make it more patient-centered.

A second-year student brought a different perspective, discussing how learning about people through the perspective of humanities creates more connections in learning, which in turn makes learning more impactful:

I think the humanities also, well, since the root of that is human, to understand a human is to understand this whole complex of all these experiences just melded into one. So I think anytime you approach teaching or learning in that way, you realize that I can't present this in isolation, I need to make sure I show how it's connected to all these different aspects, and I think that in itself makes it more important to people who, I think that's the thing, I think a lot of us want to be engaged and want to really value what we're being told, but it's hard if it's chunked up too much and you don't have those connection to build upon, so I think that helps to make learning more salient and more integrated.

Professional Identity

Another outcome frequently addressed in interviews involved helping students to form a professional identity through the humanities. Professional identity was discussed in two different ways, with some talking about humanities refocusing students on why they decided to become physical therapists, and others describing how humanities help to build understanding of what it means to be a physical therapist.

One faculty member stated that students often thank her following a humanities activity for providing a reminder of why they went into this profession. A current student echoed that

humanities refocus her on her vocation, saying, “I think it reminds me of why I want to be a physical therapist and how deeply you can touch other people's lives and interact with them and help them along their journey.” Another faculty member discussed the importance of humanities pulling students back to the bigger purposes of the profession:

I think in a practical sense, and in this is really a timing thing in our curriculum, neuro rehab is the last didactic thing they have before they go out on clinicals, then they're gone for about eight months, and I think bringing that relevance back to them is a really big deal at that juncture, because they've been studying and have been very grade oriented for a really long time, and I hear this from them. I'm not really sure that I would have thought that until I heard it from them.

A student agreed, stating,

I do think it can really supplement our education even more because it is so easy to lose touch in that first year, and things like this could help to remind all of us why we're learning about the somewhat pointless things we're learning about, and realize it actually does have a point, and the reason that we're learning these things it does have a point and a purpose.

Echoing faculty on the way the humanities remind students of their professional identity and purpose, one graduate stated:

As a student you are so concentrated on the next test and thinking about the different diagnosis or the different special tests you are going to apply to that patient. The humanities really bring home the concept of why most of us chose to go into this profession originally.

In addition to reminding students of the reason they went into the profession, the humanities may also help students to understand the full scope of what it means to be a physical therapist, according to faculty. One faculty member suggested that humanities help students to understand “what it means to be a professional, and being a professional, the obligation to the profession and the organization, the obligation to the public, the ethical commitment, the moral agency.” Another faculty member discussed how the use of humanities helps to teach students the bigger picture of patient care, exposing them to the aspects that might feel less comfortable for them:

And if you talk to most students, that's what attracted them to the profession, in part at least, is that we want to help people get back to what they love to do. I mean, we say it, but when it comes to doing it, it takes a whole different type of skill-set, one that they have never thought about. I mean, they think the way to unlock that is that you're able to perform these skills, you know, take blood pressure and vital signs and look at the lab values, and I'm going to look at these particular things and then I'm going to create interventions. The other aspects of listening and being comfortable with silence and being comfortable with suffering and being comfortable with depression, and that authenticity is a little scary, and it's a really intimidating part that I think students underestimate. And so what happens is that it feels so scary that they often times avoid it and they run to easy outs, like why doesn't this patient care, why don't they try harder, why aren't they motivated, all of those sorts of things, because it's easier and it's not as uncomfortable.

Another faculty member explained how the humanities help to bring students back to the roots of what it means to be a physical therapist:

If you look at, even in the clinic, clinicians, many of them, are wary of this way in which we have tilted so sharply to the evidence side, and this is something I talk about with my students a lot. ... that people have lost touch with what or some people truly never got the picture of what evidence based practice is, and it's not just [scientific] literature. So some people think evidence based practice- that means empirical evidence. You use studies to inform your practice, end of story, $A + B = C$. But evidence based practice as I know and you know, and what I tried to get across to students in many different ways, is the empirical evidence, patient preferences and goals and visions, and then clinical expertise. All those very, very important and overlapping, and it's the overlap that's critical. And so there are PTs out there, I'm sure you've encountered them, distressed by the fact that the students are coming out in the clinic and are like, oh, well if you can't cite a study on it, why should I do it? Or they kind of have a little bit of, and this is not true for all students, and sometimes it's really just the clinician's perspective, that if there's no evidence, then it's not worthy. You know- 'you should know better' or 'why don't you have evidence to support what you do,' and I think, you know, the fact that they feel like some people are coming out less and less interested in the patients and patient stories and more just about technique and convention and credentials. So there are a lot of people out there who value and feel like the roots of PT, they're rooted in humanities, they're rooted in the art of practice versus the science of practice. And so I think there's a real craving for it.

Several faculty members discussed personal benefits of using humanities in physical therapy education that were linked to their professional identity and purpose as teachers. Talking about the benefits of humanities use in the classroom, one interviewee explained,

It gets me through the day, because if I only had students complain about their grades or the curriculum is too hard or it's too packed, there's too much homework, you're demanding too much, I'll lose track of why I'm here. If I bring cases, examples, or patients in with me, it reminds me why I'm standing in front of the room, why I want the [school] student to be better therapists, and more human therapists, so that's how it really helps me. I try and think about and I teach them this way, that if your mother, your grandfather, your parent, that's always the person laying in that bed. So how would you treat them? And if I stop and I just go, 'This is a joint, and I focus on the joint, and not the person,' then I haven't done my job.

Another faculty member talked about how the use of narratives and discussion boards helps to invigorate her as a teacher and give her new insights into her students:

That is one of my absolute favorite things about going back and grading the discussions boards and reading that person's who really never did speak in class, and finding these incredibly deep insights, and there is the substance, right, and their perspectives are just so much more powerful. Not that I ever want to minimize a student, but you don't always get to see that, right, in class, and so it's just a wonderful thing as a faculty member. It's very fulfilling to sit down and really remember what kind of people we picked to invite to our program, too. It gives me a sense of purpose in a way.

One faculty member explained that the use of humanities helped students to see who she was as a clinician, stating, "And that was feedback that I got from students, that they would say you genuinely seem to care about the person behind the diagnosis." Another spoke of it helping her personal development as a professor, saying,

So I feel it's really helped us all as faculty to develop because sometimes we are so isolated and working on our own courses, and we can we hear other people trying to discuss topics and ask questions in a different way, it really makes you consider other perspectives and stuff so I think it does just help us all to grow.

Soft Skills

Often mentioned was the role of humanities in the development of “soft skills”, a term used to reflect patient care skills such as communication, empathy, compassion, and active listening. Multiple faculty voiced their opinion that students are focused on acquisition of measurement and exercise prescription skills and often don't appreciate the need for intangible skills to be developed. One faculty member said,

...a lot of times we see problems with students as not so much because they can't master the technical skills, but it's these other skills, the soft skills, so to speak, right, that they were having trouble with. And I just felt that, you know, that's the part we need to attend to.

Both graduates and current students often expressed that humanities teach them about the “softer side” of patient care. One student acknowledged the cultivation of “soft skills” through humanities, stating, “It's not something generated directly from our textbooks.” A graduate talked about gaining an appreciation for the soft skills cultivated through the humanities:

But maybe just developing in saying, ‘You know what, this isn't all going to be from textbook to patient.’ It's going to have to be from eye contact, and the words you say, and how you say them, and how it makes them feel, how it makes you feel, and that part, I would say most of the class grew in that way. I feel like I did personally, as well. Some people would be very textbook savvy and get perfect grades but then we would

participate together in labs and I wouldn't understand how they would teach an exercise or something without paying mind to the interaction that they're sharing with me or building rapport with me as the patient. I think those parts, we all definitely improved with that. Indirectly, I would say, I think they majority of the people grew.

The soft skills were cited by another graduate as an important tool for becoming a successful practitioner:

It's so interesting, I feel like from a professional standpoint our patients always appreciate our soft skills and they value that. I think in one of our ethics courses, we learned PTs are one of the least sued health professions because our patients just tend to like us more, and so it's interesting because I feel like our soft skills are kind of the way we compete, but generally in the profession we've looked more towards developing more hard skills.

Communication was the most frequently mentioned soft skill, and developing the ability to have difficult conversations was frequently addressed. One faculty member discussed the importance of effective communication skills fostered through the humanities:

...I think that the way we have this structured, [students] get actual skills that they need to navigate the conversations that might change the outcomes for patients. If you can't talk to someone about their prognosis in an honest way, if you can't talk to someone about how to find meaning in a new way in their life, then your rehab is going to be hampered. What you're doing- from the book- is going to be hampered. So I obviously believe this is extremely relevant to be successful in neuro rehab. From a professional development perspective, I think the narratives, and even the discussion board-putting your ideas out there, thinking through how you would use something or what you learned from a

situation- is just a tremendously useful skill that I wish would have been emphasized earlier in my career.

Another faculty member discussed that many students lack experience dealing with tragedy or suffering and explained how humanities can be a tool for preparing them to handle difficult or “uncomfortable” moments with patients. She described humanities as a way to “start to safely introduce people to that kind of very fragile situation.” She expanded,

You can't teach vulnerability and fragility, openness to suffering, because it can be scary for students, like ‘oh, my God, they were telling me about this or that and they started crying and I didn't know what to say.’ When a student feels like ‘I didn't know what to say,’ and ‘oh my gosh, they said that their husband was beating them,’ or any number of things that come up, they start to shut down, because they don't have the tools to be open to that.

Reinforcing the need for students to learn how to handle challenging situations, one faculty member talked about using humanities to teach communication skills:

So that's really what that really fostered our use of using the humanities within our own course- to get at some of those deeper questions, like how do you respond to your patient with a spinal cord injury when they ask you if in two weeks they're going to be able to get back to playing soccer, and things like that, and some of those difficult conversations we have with patients, that we want the students to think about before they go out to clinic.

A graduate reflected on the value of her education on her communication skills when working at a neurological rehabilitation facility:

I just felt like there was such a strong psychosocial component and such a strong humanities component when you're dealing with catastrophic injuries that I felt like that

was just a huge part of my day to day, and I was very grateful for the aptitude that I felt like I had coming from [institution] to have difficult conversations, to be able to listen to people, and to empathize with people who were all going through really catastrophic injuries, so I felt like that served me well throughout my career there.

Recognizing that active listening is an important part of effective communication, one faculty member talked about a student project designed to build active listening skills through interviews:

The guidance I gave them was having them think about what real active listening was, and how there's real empirical evidence out there to show that when you don't, for example, the physician doesn't listen doesn't ask the right questions and already makes up his or her mind three minutes into the subjective conversation when they're getting information from the patient, that they misdiagnose all the time. And so I talk to the students about that too.

Faculty and graduates alike recognized that the expected outcomes of humanities might not be something that can be fully appreciated while still in school, but rather something that has meaning throughout a career. Graduates spoke of how the development of soft skills in school now helps them to form connections with patients. One alumnus explained, "It also teaches us how to connect with our patients and gives us that human connection that will make us better PTs, not just be people to understand where our patients are coming from, having those empathetic listening skills, those types of things." Graduates also spoke of the power of the humanities in teaching them how to connect with patients through both better understanding and finding areas of common interest, especially patients who are perceived as "difficult." According to one graduate, "It has helped me having to see how to approach each person, again seeing them

as individuals.” Another graduate pointed out that humanities create learning opportunities which can help students to recognize their biases and examine their values, attitudes, and perceptions.

Empathy was another soft skill identified by interview participants. A student described how the humanities have helped her to develop more empathy in patient care:

I believe that the humanities touch upon the intangible patient care skills which I think as physical therapists, I would like to think we’re known as healthcare providers that typically provide good patient care in terms of service quality... One of the ways I've seen that manifest is I feel like I had more have more empathy. Just reflecting on my studies in anthropology, anthropology is a very humbling discipline in that it asks you to kind of do your best to strip yourself of preconceived notions brought by structural systems... and so I think the humanities has helped me become- has helped me develop greater empathy to try to understand people from different walks of life that I can't relate to initially. It's asked me to be more open and to be more critical of my notions and judgments.

One third year student who is also working on her MBA provided a unique perspective regarding the importance of developing soft skills through the humanities:

Moving forward, a lot of our reimbursement will maybe shift towards patient experience and did they find satisfaction with care, and I believe that touches upon a lot of the intangible skills that we need to develop as therapists. And the humanities can help with the development of that, because some people don't care unless there's a bottom line.

Reflective Practice

Another expected outcome of use of humanities is development of the skill of reflection. Reflective practice, often developed through the use of narrative, is strongly emphasized at this

institution due to faculty interest and expertise in its use. One faculty member described the importance of the skill of reflection:

Just like we all do sometimes, I think it's really easy for the students to get sucked into 'I have to read this' and 'I've got this assignment' and 'I have lab tomorrow.' I don't think they sit back and think about why they make particular decisions or why this affected them a particular way or what will they do next time instead of saying, 'Wow, that was a terrible situation,' and moving on, or 'I didn't handle that very well,' or 'Wow, I did a great job,' and then it ends there. So I think that these different activities force them to sit with things quietly and actually process, at least personally process a situation, whether or not they, depending on how the assignment was structured, whether or not they incorporate a small group in that conversation, and it at least makes them reflect on their own actions and plan for the future. Otherwise, I think a lot of times they're just so busy just trying to get through the day that I don't think that they think about that reflection until they get to clinicals. So I would say for internships two and three, when they're not engaged in the humanities, I think at least we've set them up for being able to do that reflection on their own or with their mentor or with a friend. Even if it's not written, they're at least asking themselves those questions. And I think otherwise they would just move through the curriculum and maybe start to do that on their later internships if they had a good CI [clinical instructor] who was asking those kind of questions. Maybe they've gotten to it, but I can easily see them moving well through the program until they got their feet under them enough to start thinking about the things external to them instead of just 'woo, I survived today,' which happens a lot.

The development of students that can be seen through analysis of narrative was discussed by the same faculty member:

I definitely think about the softer skills and students, they get so fixated on the technical skills and wanting to be good technical clinicians, which of course is important, that they don't consider the soft skills. So what's interesting, and what I always say to them, once we would start writing those narratives, what you hear from them going out to clinicals, are all these things they're worried about doing correctly or technically: 'You know, I hope I can manage those lines and tubes. I hope I can transfer that max assist patient.' And then what they actually come back and write about is those softer skills. They write about a challenging patient interaction and what they could have done better had they asked if any questions or if they had not been worrying about completing their checklist, and how to really listen to the story, or they'll write about how their clinical instructor handled a difficult conversation with a physician, or how their clinical instructor had a difficult conversation with a caregiver about discharge destination, or things like that. So they end up writing not about, 'Wow, I did not do that transfer well.' They write about professional things that they either did or they observed and difficult conversations and so it ends up being all about interpersonal communication and professionalism and things like that versus those technical things and then they all chuckle.

Faculty frequently spoke about the power of using reflection and narrative when the students are out of the classroom and out on their clinical experiences. During this time, students use an online discussion board to share their narratives. One faculty member stated,

...I think it's also a way for them to also have some community, and I think that they do start to see the value of writing things down and really thinking about... why the situation

didn't work out or what they can do differently next time. And so I think when they start going through the rest of the internship and they're really able to reflect in action instead of always having to reflect on action and making plans for the future, not that that's a bad thing, but I think they start to see that they're able to reflect in action and make adjustments and elevate their clinical abilities as they move through their internships, and so by the end of the time that they do the exit interviews I think they appreciate it, so I definitely think it's a growing process of understanding for them.

Another faculty member discussed use of narrative as a valuable tool to help students to gain better insight into areas needing improvement:

I had a student who struggled in her final internship out of state and I could tell she was really having a hard time wrapping her mind around what the clinical instructor had identified as deficiencies, and her clinical instructor was having a hard time at times articulating that explicitly enough that it could help this student, so she ended up having to do remediation. and one of the things I had her do very early on was to do a self-reflection based on the Gibbs model, and some things that came out of that, her taking her time and really sitting in reflection and going through that process revealed some things that haven't come out of our conversations her conversations with the CI, or my conversations with her when she was at the clinic being assessed. And I think it was after the fact when she could do that in a reflective way that was really helpful for her as a developing clinician and for me in terms of how to really fine tune a remediation program. So that's another way I used reflective practice outside what they were already doing.

Several faculty suggested that humanities help to develop critical thinking skills through reflective practice. A graduate emphasized the critical thinking skills developed through humanities, stating,

The humanities also foster some critical thinking and how to have variations and viewpoints, and being okay with there not being a right answer, and that can be a very different experience than a lot of science classes. Some people who go into medicine and health care and realize there's a lot of grey, and not a lot of black and white, and have had a lot of educational experiences with black and white, have a bigger difficulty navigating that, because they're still looking for that right answer.

Talking about the skills developed during an integrated humanities experience completed as both an undergraduate and as a graduate teaching assistant, the same graduate provided an example:

We would look at pictures from Dante's Inferno or illustrations or images in these old hospitals, and we would talk about a patient's experience, and it would be in the context of something that seemed pretty heavily medical, and everyone would look at that picture and see something a little bit different, and we'd all be standing in the same place. So everybody's viewpoint was a little bit different, and I think the lesson I learned from that was that kind of thinking about how everyone sees a patient and how are we going to respond to that patient? And it depends on what sort of circumstances you're looking at, and it depends on the attitude that you're looking at it from. And I think just having an experience with artwork where you all see something different, it's no different than when you're in a classroom. There's still different parts of equations- people's experiences, circumstances that cause us to see things differently, and it was easy in that environment to see how clearly the differences could come up, whereas in science classes

or PT school sometimes it was like, oh, I know you've looked at it wrong, oh, you thought of it differently, and that sort of mental flexibility being a skill, and that vulnerability to say, "this is what I see and that's different from what you see," instead of just saying "oh yeah, yeah, I saw that too" because you think it's the right thing to say.

One faculty member discussed longer term outcomes from the use of narrative that can be found in the research:

Even reading [name's] work and others about how very impactful basic narrative can be in your clinical decision-making, right, so maybe you think it's a soft skill, maybe you think 'why would we want to invest in that,' but you read evidence about clinical reasoning and the development of empathy, and workplaces that are now looking at narrative reflection as a way to decide who to promote even, you know, who is the strongest clinician in a more tangible way than other parameters we've looked at traditionally. These are the things to me that have strengthened the relevance of the commitment.

Several graduates talked about continuing to use the skill of reflection in the clinic. One graduate credited reflection as a way to help her to organize thoughts and foster understanding. Another explained, "I really started using that practice pretty frequently. It was just one assignment, but then I started journaling during my clinical experiences and now am journaling as a practicing clinician, of just having that reflective mindset." Another spoke of the value of reflection after stressful days in the clinic:

I've actually had a couple of difficult situations at the hospital where I work now where I really had to go home and put something down on paper, because I just couldn't hold it in anymore. I couldn't leave it at the door, basically. And I'll end up tearing up as I try to

type something because I'm so overwhelmed with emotions. I think that's the first part in trying to get the story out.

The same graduate continued to talk about how important narrative is to her, recognizing that not all of her classmates have continued to use it in the same way she has:

Now that I've graduated, I'm trying to continue to develop my skills, and I still use my narrative tools. I'm working on something right now and trying to cope with one of my patient experiences through that. And as someone who feels that I learned from the humanities, I use it almost every single day. I use some of the skills learned every day to get through to my patients and to get them to work with me... I kept that with me and considered it a tool in my toolbox, while maybe somebody else considered it as 'well, we did that as an assignment,' and then they moved on and 'now I have to see 10 patients in one day and they're all evals.'

Well-Rounded Clinicians

Many of the formal and informal conversations which took place with interviewees acknowledged the value of the humanities in helping students to be "better people." Taking the discussion further, the director of the physical therapy program spoke of his desire to develop well-rounded clinicians and future leaders through use of humanities:

At a very basic level, I want a well-rounded clinician who not only knows how to fix the patient, but that is also going to engage all aspects of a human as a complete healer in a sense. To me, that's the basic standard. But my higher aspiration is really, if we want to create leaders of our profession for tomorrow, and leaders really are people who have a broad vision and look beyond just the narrowness of their profession, and who can think more broadly and all, so my goal is that we are creating broad-based thinkers, visionaries,

that's the aspiration we have... And that's what I hope we can inspire in each and every student to sort of come up to that vision- for the profession, for themselves, for the larger community, and go make it happen. But we need some tools along that, so what awakens that vision? It could be the humanities, it could be any number of things.

The director also spoke more broadly about the importance of humanities and a liberal arts base for students entering into graduate level physical therapy classes:

To me what is important is that we as a PT profession get known on our campuses, and this offers a great way to get other folks to know who we are and then do something jointly with them. I think it's important for us to have those connections, and the humanities offers that, to out of your profession mold and to reach out to the liberal art folks and all that on campus. I think it's really vital that we do that for marketing of our own profession- who we are and what we do- so to me this has been wonderful, what the faculty has done, because it's really gotten us known within the [name] campus, and in the long run I think this is what we show to society, why a liberal arts education is not a waste, it's an important thing. In fact, we had a panel and I actually told my liberal arts colleagues, I said, 'Look, we in the profession depend on you to send us students who are ready to problem-solve. We can teach them about PT and all that, but we need some problem solving thinkers, the broad thinkers, and that's what the liberal arts and humanities give. So you do a good job getting them to think, to write, to express themselves, and then we give the specific tools of the profession.' Without that you have a technician, and we do not want to reduce our profession to that of a technician.

A graduate echoed the importance of gaining perspective and understanding through a broad based education to help make connections with patients:

And so when all you've ever been in is in school and, obviously in competitive schooling, and high stakes education and academia, that's what you're surrounded by, and so as a college student or as a PT student, before you're in the clinic, you don't have much interaction with people from different socioeconomic backgrounds, and in a lot of schools, people with different ethnic or religious backgrounds, and so your worldview is based exclusively on highly intellectual people who look like you, and talk like you, and think like you, and grew up with you. And obviously there's diversity within PT schools, but not the type of diversity that's present within the spectrum of patients that you're going to see some day, and so I think it's difficult if you haven't explored the humanities or you haven't put yourself in classes where you're exposed to different types of thought and different types of medium, different types of conversation, all of those sort of things. And it's really different when you graduate, right, and go to a place where you haven't lived before, you haven't been a professional, and haven't interacted with the whole of the world, and when you've encountered other people, maybe it's at the gas station or the grocery store, and it's in this different type of world than it is now, and so I think regardless of what your career path ends up being, you're exposed to the wholeness of the world and wholeness of human experience and wholeness of thought and human action, and you have some leverage so anyone you ever meet, you have some language to be able to speak with them, whether it's music, whether it's art, whether it's food, whatever it is, there's something there that you can gain from an experience with the humanities instead of just pure knowledge or just pure facts, because those are all constraints on language. And if you don't have the same language as somebody, that makes communication difficult, but if you have these other mediums that cross of language

barriers, there can be shared experiences there that are hard to replicate in other classes, I think.

Another student described how the humanities help to create ways to connect with patients:

I think incorporating the humanities and just studying it will help you to better your ability to interact with patients and caregivers. I think it brings back just that whole human aspect to every patient we encounter. I think a lot of people get into PT because of the patient care aspect. I think you can kind of get lost in the science of everything and the injury and what happened, and at some point you're just meeting somebody where they are in their recovery process, and if you can interact with them, you know you have your license, your work, you have all that scientific knowledge and background to treat them well, so if you can meet them where they are on any other level, whether it be through music or books or art, I think it's unique, and I think a lot of practicing PTs out there have time to work that into any conversation, so I think it's critical.

The connection to others which humanities have the potential to create was emphasized by the program director, who said:

You know, I remember this one person saying that, you know, he came from a rural background, you know, and he went to the college, and he said, look, college opened up to me worlds that I never knew about, like, you know, just getting a basic bachelor's degree, all the history and all the philosophers and this and that, it opened up a whole new world to me. And so, if you have a patient who is a philosopher, you can relate to that, you can talk with them, and if you have a patient who's a plumber, you will be able to discuss things with them, right? So it fosters communication and we know that

communication is what we need to prevent errors, and so I think one could make a case there.

Discussing the impact of humanities on his development, one current student provided an explanation about the power of bringing humanities into his educational experience:

Finding the interconnectedness of the human experience has been integral to my learning and healing over the years, and I hope it continues to help make education more personally impactful. We are creative, emotive and experiential by nature, and personally I believe the more I have explored and enhanced my ability to embrace these elements the more I have grown in my critical-reasoning, creative problem solving, open-mindedness, integrative awareness, self-expression and interpersonal relatedness.

Transformative Learning

One of the benefits of humanities often mentioned are their ability to create transformative moments, learning that resonates. Transformative learning recognizes that an individual's experiences shape the frame of reference through which they see the world (Mezirow, 1997). A frame of reference impacts the way an individual understands their world, and can only be changed with exposure to new experiences which challenge one's beliefs, causing them to form new meanings. A student spoke about the power of transformative moments in the classroom:

...the best learning and the learning that lasts the longest is learning that has more personal meaning or kind of that draws upon your emotions and draws upon, arouses you in some way, and I think humanities allows for that in a way, whether it's by having a personal experience presented or putting you in a certain situation that forces you to experience your learning more, like having to present or be part of some creative project.

Each student and graduate interviewed was able to describe an “aha” moment where their eyes were opened to something surprising or emotion evoking. One student spoke about the way that an international trip changed her life; another spoke of the power of working for the journal. For many, it was a moment with guest speakers or panels in the classroom. The faculty member who organizes the panel said,

I get the ‘wows’ from that experience- how enlightening it is, how meaningful it is, how important it is after studying in the book for so long, how grounding it is. And I often get the feedback that it was a helpful reminder of why I went into this profession, that I really needed that session, for whatever kind of compass that is.

Another student referred to the emotional response she had at the Service of Gratitude. One student talked about the impact of reading her narrative within her discussion group:

We went around the room reading- each student read their own reflections and narratives, and I went last, and when I put down my paper when I finished reading it, everyone’s eyes were on me, wondering where that came from. And I got the feeling of ‘was that too much, was it too emotional?’ Was that a little beyond what we were looking for? And immediately after that, folks just started to get inspired and kind of build up on what they had felt about that or even their own narrative.

A faculty member talked about the student responses to an interview project she assigned, stating: “And there are some people... who were caught off guard and kind of blown away but that kind of depth of conversation, that kind of vulnerability between two people.”

A graduate told a story about a moment that resonated with her:

That actually happened this past summer, where I was working with an individual- she’s 41, she has quadriplegic spastic CP, she’s wheelchair bound, and cognitively she’s not-

she's severely impaired. So I went through my treatment with her, and at the end of the treatment she gave me a thank you card, and she actually, which I had no idea, she actually paints and designs notecards and thank you cards. And it was really pretty remarkable because I had no idea. It was this beautiful card and I just, I didn't think she had the skills to do that. And it made me self-reflect because I didn't see her potential to contribute to society until she wrote me a thank you card for her treatment sessions. And it was awful for me because I felt like an awful person for not having seen that potential, but also reminded me that what I perceive isn't necessarily the correct picture.

One faculty member told a story about a transformative moment in her career, speaking of how her perspective changed by working with an artist who had lost her ability to paint with her arms and had begun painting with her mouth:

And so that was, she was a beautiful person and her mouth painting, that whole experience for me was just, was really powerful, and I met countless people like that, and it just kept reminding me time and time again of what it means to lose, to feel like you're losing, your self-respect or the respect of others, you're losing autonomy, you're losing the way you look at yourself or the way that other people look at you, and I don't think there's any way to help return that to someone without some aspect of humanities.

Assessment

When asked to describe how outcomes of the humanities are measured within the program, faculty universally acknowledged that assessment of the impact of humanities in physical therapy education can be difficult. The main way in which effectiveness of humanities is assessed is through the analysis of student narrative reflection, but graduates and faculty agree that long-term outcome measures are needed to show the true impact of humanities.

Outcome measurement is primarily focused on assessment of narrative reflection, for which the faculty uses the Gibbs Reflective Cycle (Gibbs, 1988) adapted as a rubric. The Gibbs model guides the student through desired stages of the reflective process, starting with a description of the scenario, followed by reflection on their feelings and thoughts, then an evaluation of the situation, followed by an analysis, and finally a conclusion which includes reflection on what the student might do differently next time. A faculty member explained how using the Gibbs model improved the quality of reflections, stating,

We found that when we didn't ask them to use the Gibbs model, even though we taught it to them, they didn't always get to the deeper levels of reflection. They would think that they would, but then when you would impose the model on top of it, they would realize they didn't, so we do make them use the headings to develop those narratives and then they can fully develop them.

Another faculty member provided history of how and why the Gibbs model was implemented:

So we looked at the levels of, initially, and I can't remember, I think it was the reflections in our initial paper, looked at the level of reflection that they achieved in their writings during the short-term experiences, but that was before we imposed Gibbs, and so we analyzed that and realized that they weren't getting to the higher levels of reflection, and so that's when we chose to, even though we had, I think we were using Gibbs, but we hadn't made them use the headings, but our earlier writings were looking at the level of reflection they accomplished, and then we recognized that they weren't getting to those higher levels, so then we did impose the framework and we made them write the headings in their pieces, and then we looked at them the very next year and realized that now by imposing that framework on there and making them use the headings, it ensured

that they accomplished what they were supposed to in writing that narrative and they got to the higher levels of reflection. So even if they didn't get to the highest level, they got to the second highest level, as opposed to the first time when it was more descriptive writing with occasional descriptor reflection versus accomplishing these higher levels, so I definitely say we've looked at their ability to reflect and get to those higher levels of reflection, and by extension then, that should be affecting practice. And we definitely compared the different practice settings and those kind of things, but haven't actually necessarily asked the students to reflect on later, although there's been some discussion on it- can we go back and ask those students later now that they've practiced for a year or something like that. Do they feel that that has affected their ability to reflect more in action and for action than on action?

Although the Gibbs model is currently the method of assessment used across the faculty, one member commented on its limitations:

I've used the Gibbs model, and I continue to use that, to make sure that they're actually putting in the time and the thought, but within that there is laterality, too. You need to be open to just allow the students to process, and so I think the measurement piece is a little tougher, it takes more time, because it's not a Scantron, and it's not a right answer, but I think that's a much higher level of intellect that you're trying to measure, too, so I think it's very valuable.

Another mentioned that using Gibbs can still be subjective, saying, "But the rubric talks about depth of reflection and how you measure that, but according to our opinion, right? Relative to what we see other people do."

Two faculty members described the theoretical basis for what they are observing with narrative writing being based on the work of Schön and Mezirow. According to one,

One of the things we look at is the way they reflect over time, so we use the Schön and Mezirow framework and try to see if they start to develop more reflection on action instead of reflection in action or more premise reflection versus content reflection, so they're becoming more sensitive to other stakeholders and other perspectives. They're able to think in action quicker now.

Discussing how growth towards outcomes can be demonstrated in the narrative reflections, a faculty member described the change that was seen in a recent research project:

We looked at residents over three time-periods to see if the type of reflection they use changes, and they get more sophisticated in their reflection. We also looked at the themes that they're writing about and we found clearly that during the early part or short terms, they're more centered on themselves, they're more narcissistic, and less patient-centered. They tend to write more about themes of lacking confidence or professional identity and less about critical thinking and problem-solving. But as they get more experience, they begin to change what they're writing about to be more patient-centered, lest they're getting more confident, and they're writing more about problem-solving and critical-thinking. They're focusing more on what they're doing instead of worrying about or being concerned about themselves, so through the reflective process we're able to pull that information out through the writing and thinking about it- I think it helps them to do that.

Narratives during short-term experiences are graded on a pass/fail scale: "For the narratives that are embedded in the gen ed, musculoskeletal, and neuro experiences, there's not a specific grade assigned with those, but they have to do it, so if they didn't do it, they wouldn't

pass their clinical.” Looking beyond narrative, faculty described other humanities related assignments as being graded less strictly:

I'll say of all things that I grade, the discussion board is probably the softest. Almost everybody scores well, unless they really don't take it seriously. There were just a couple of people we had that were just sort of blatantly resistant, and we addressed that, but for most people, if they participate and they give it a fair shake, they're going to do okay.

The same faculty member continued,

And then the same thing in the advanced neuro [course], they do get graded, and so again looking for the quality and the intention, you know, did you just slap this poem together to get it done, or did you create something that was meaningful to you and then you were able to articulate that to me? Or if they did do a written narrative, did they get to those higher levels of reflection? Did they consider other perspectives? So that's where we've really gotten into grading them. So as far as how they choose to express themselves, we don't really put a grade that.

When less traditional forms of reflection are used such as art or poetry, a faculty member described the assessment in the following way:

I think it's because I do have them, instead of just turning in the piece, I do have them write about why they chose to do that and what they learn from that and those kind of things, although they don't have to do a full narrative. Because hopefully, part of the Gibbs model was that you have to describe the situation and what were your feelings and things like that. Hopefully the piece has done that itself. Maybe it hasn't fully fleshed out the situation for the student, so the student may be writing one or two sentences in that paragraph about the whole situation, but you would hope that you would get a sense of

their feelings by looking at what it was they produced. So you might get a sentence or two about their feelings, but then they really tell you why that was meaningful and why they chose to write about this or create this, and if they've written that paragraph, then you get that sense of how that's going to help them moving forward. And so that's, you know, what I end up grading it on because between the piece and the little paragraph, I do get a sense of the purpose and how that's going to affect the student.

One faculty member talked about the struggle to find the best way to assess the impact of humanities:

And in neuro, and in some of the other more scientific diagnostic courses, it makes sense to do multiple choice tests. It makes sense that you need to get that knowledge base and make sure that they have those foundations. And so, on the other hand when I was teaching psychosocial, I didn't feel it was appropriate at all to do a multiple choice test. I needed to hear what they were thinking and how they were processing information. So I haven't exactly figured out how to balance that within a scientific course, because in a scientific course I do want them reading evidence, reading articles, they need to read the book chapter to understand, so it's trickier to incorporate that reflective piece, but what I have found that I'm going to do in my Growth Processes course here at [the university], where I teach Geriatrics, I'm going to do some discussion threads online. And so they're brief- the grading won't be super high stakes, it will be mostly participation, but asking more of those reflective questions in a discussion thread, and having students respond to each other through that discussion thread, I think that's a fairly reasonable way, as long as there's not one every day, to try to get it that piece.

Some spoke of how to assess narrative with a less formal approach:

I've looked at qualitative research, so I can watch the verbiage and see how from week-to-week it changes over the ten scenarios [in her course]. And at the beginning you have novice kind of statements. As you progress through this semester their self-assessment and self-awareness changes, and you actually see a kind of curvilinear response... But so I still think it's important for them to be self-reflective and some of them don't like that.

Faculty acknowledged that there are other formal assessment methods out there that they are not currently using:

I think I've seen different things measuring expressions of compassion or empathy. I think there are ways to do it, but we have not implemented any of that. So beyond the level of engagement of the students, which I would say the grades probably reflect that as much as anything else, because most of the people who really get engaged and give a thoughtful answer score really well, but I still think that's not really a very objective way to look at that.

Measuring the impact of humanities integration on students' clinical performance is a task that faculty identified as challenging. Faculty informally see work of humanities in feedback when students are in clinic:

We do get feedback in terms of how well they attend to the softer skills. But part of it might be due to the whole interpersonal communication competency we have in our curriculum. But we do get that feedback that love how they relate well with the patients, they educate, they take the time, they explain, things like that.

One faculty member involved in clinical experiences discussed the challenge of assessing impact of humanities in that setting:

And it's challenging from a clinical perspective, too, I think, because clinical education is measured very objectively, or it's trying to be very measured very objectively, through the CPI (Clinical Performance Instrument), or we have our own competency-based education tool, and while the tool is great, it's still limited in the fact that you're putting numbers and percentages on things like interprofessional relationship skills, and patient education, and there's really not a huge shift around that, I think the CPI is going to be fairly well ingrained in our profession. I think it's great, I think it has a place for measurement, and we need those numbers, we need to know that we're achieving competency and safety, so I think it's going to be on the onus of the program just to somehow ensure that not only are we meeting these metrics on the CPI or whatever tool was used, but are we sending them out prepared from an interpersonal as well as a humanitarian, well I don't really know the right word I'm looking for- the soft skills- are we preparing them with the soft skills well, and maybe there is a tool someday that will measure that, I don't know.

One person discussed that a difficulty with assessing outcomes is that the impact of humanities may be seen more in the long term than immediately after the activity:

I think it's difficult because I think sometimes with research, it's easier to set up a short term study than a long term study. Maybe in the short term it wouldn't be the same, maybe the one therapist that had more of a humanistic approach could have a better outcome, but for the short term, in what they were trying to treat, they both had the same measurable outcome. But then you might be leaving out a component that would have shown up right then, and maybe it wouldn't even show up then, but you'd be setting up more of a longitudinal approach in looking at that impact, and maybe down the road that

one experience stuck with them, and they carried that with them and they had a much better progression throughout that process, whereas that person continued to feel like they weren't being fully heard. And yeah, I think you can see outcomes. I think humanities has the best effects in the long term in terms of what we do for people, but I wouldn't discount also saying you could have a short term huge effect in some ways, yeah.

Long-Term Impact of Humanities

Recognizing its importance, many participants discussed the challenge of being able to show improvement in long-term outcomes in patient care due to humanities integration. A senior faculty member stated,

Better patient care outcomes are hard to do- I mean, how do you do that? How would you develop a study where certain therapists are exposed to the humanities and certain others aren't, and how you would follow them and engage their patient outcomes. So I think that's a problem... I don't know how you would gauge outcomes if you're making students more humanistic. Can you do that with the humanities, and what does that really mean? Can you make them more sensitive to patient care? Can you make them more patient-centered? Can you make them attend to more psychosocial issues? I don't know how you would measure that. Now I know that Rita Charon uses [narrative] with her medical students and interns at Columbia, but I never read anything outcome... I've taken her seminars and I've never heard any outcome measures that she uses. Most of it is anecdotal.

The challenge of researching long-term impact of the use of humanities continued to be discussed:

It's one of those things that are really hard because how are you going to design a study where you're going to have them go in with this sort of skeletal piece of delivering care? You can't make a patient not engage you and try to share with you a story. You can't tell a therapist to not be compassionate.

Talking about the importance of finding better ways to show long term outcomes attributed to use of humanities in the classroom, one faculty member contributed,

And I think that's the difficult study that we have to think about with how it contributes to patient outcomes. Look, everything we do, people want to know, does it help patient outcomes? ... A lot of errors happen in medical health care practice just because of communication breakdown, right? So if incorporating more humanistic values and courses or activities within your curriculum makes them better communicators, then at least you minimize errors, right? So if we can show a linkage of how the humanities actually makes people better communicators, then I think we've done our job.

A faculty member talked about a research project she would like to do to assess long term outcomes:

I would like to do a study where I would like to look at our alumni, because I am an alumni, but I would like to do a study on our alumni to see what their job performance is in relationship to their humanities characteristics. So coming from a school that does have this as big part of their culture, how has that carried forth? How has their humanities education influenced and informed their practice? Are they thriving, and do they attribute that to the humanities piece? Do their managers think that they're thriving? Do they do a great job with team conference? Do they do a great job with patient education? Some sort of survey or tool that looks at that, because I think you would see that.

A graduate who has recently started teaching also pondered how to assess the outcomes:

In terms of tracking patient outcome measures, I think it will be interesting if you looked at if patients have more satisfaction with their PT if their PT has more exposure to humanities, but again, that's very subjective, it's not white or black, it's not like you can have a quantitative measure. Just like grading the humanities is really tough because I can't necessarily tell the depth of reflection that a student puts in. I'd be curious to see patient satisfaction. Or do patients get better faster with clinicians who studied humanities? Do patients adhere or buy into treatment more? I think that would show up in outpatient ortho.

Another talked about the difficulty of identifying objectives for clinical outcomes:

And the difficulty coming up with an objective right away is the fact that it's not something that is easily objectively seen or measured, um, but it's almost always there. It's the difference between, you know, two clinicians need to know how to choose the right intervention and use it and not jeopardize patient safety or their right to the best care, but two clinicians can say or do things in ways that make that patient feel empowered and ready to take on this challenge, or to feel totally isolated and alienated. But both can be safe, and both can, in a way, implement an effective treatment. So I think in the end, you prioritize that, which is very measurable, with which you can determine success or failure very easily, but you can't always, say, as easily, like whoa- your tonality in what you just said and the way you said, I want you to do this vs. this is what you're going to do, you interact with that person in two completely different ways, but that's not always measured, and hard for people who are doing it to really realize that they're doing that.

A current student expressed his concern about the limitations of assessing the impact of the humanities:

I guess part of it is that it's hard to objectively measure. I think one aspect I've seen is research in reflective narrative. You take something that is very qualitative, and you have to then somehow summarize it into statements or whatnot that can be quantified. And it's possible, but it takes this... you still kind of have to break things apart, and in making an objective, the one thing I can imagine is beyond saying that someone can identify the benefits of neuroplasticity or the common sequelae after stroke, um, is to express how that might impact someone's life, or express the journey or process that someone might go through in their recovery. So coming up with objectives that aren't going to be so finite, but then also force people to be very integrative and be able to explain something, and are open to that person's interpretation of how they would chose to express that, beyond saying that everyone can identify A, but I mean to write a story is not going to look the same for everyone. But making an objective more about the humanities, um, I would say that your ability to reflect- I mean reflection, there is a technique to it, so perhaps writing objectives that relate to a person being able to identify some of those techniques or their aptitude for reflecting. Do they seem to have all those components to that, and I think an element of that can also come into empathy, and how well people are able to sort of see where they're coming from, as well as impact the people around them. It's a tough thing.

One student expressed concern that trying to assess some aspects of the humanities might stifle the essence of what humanities are about:

I think the tough thing with bringing humanities into the curriculum... is also bringing creativity in, and you can't always grade creativity, and if you do grade it too much, you take away people's motivation to be creative. It doesn't always feel- it takes away the very thing that helps you to be the most creative, which is just being intrinsically motivated. So the more that the environment can say, or just challenge you, or ask you to do things in different ways, or instills in you the mindset that I'm not just going to take the status quo, this is how I'm going to do something, I'm going to try to implement- bring in my own unique perspective or way of doing something and that by itself I feel like, that's like fertilizer for the humanities and creativity to come from.

The same student added,

It can be necessary for objective measures and sometimes to get people to buy in, but it's also can undermine that process, so I think it's something you do, even there, you don't want it to be too heavily weighted but more just a teaching strategy, a different way to get people to approach what they're trying to learn.

In summary, faculty were able to identify expected outcomes and benefits of humanities integration, with humanistic approach to care, development of "soft skills," formation of professional identity, development of reflective practice, cultivation of well-rounded students, and creation of transformative moments the themes most often addressed. Faculty agreed that measurement of humanities related outcomes is very difficult, and that at this point use of the Gibbs Reflective Cycle to look at student growth through reflective narrative is their best option for demonstrating humanities' effectiveness. However, faculty and graduates agree that humanities' impact is something that should be measured in the long-term rather than the short-term, creating challenges for educators attempting to show the value of humanities integration.

At the studied institution, significant support is shown towards integration of humanities without hard data proving its effectiveness. Research Question 4 will discuss the departmental and institutional factors which support the humanities use in the studied physical therapy program.

Research Question Four

Research Question Four looked at the departmental and institutional factors present which support the humanities at the studied physical therapy program. Many factors demonstrating support of humanities integration in the physical therapy curriculum were revealed through interviews and an examination of the official university website. On an institutional level, the university's support of its liberal arts traditions, the atmosphere and culture of the campus, and strong interdisciplinary collaboration were named as factors which allow humanities to thrive. Within the physical therapy department itself, selection of students and faculty who fit the culture of the department, strong support from the program director, and the presence of faculty mentors were all identified as reasons why integration of the humanities has been successful.

Liberal Arts Tradition

On an institutional level, the foundational support of the humanities may be attributed to the university's history and continued purposive identity as a liberal arts college. Although the university experienced significant growth in its professional programs and research over the last several decades, the physical therapy program director and several faculty interviewed stated that it still emphasized its liberal arts roots. According to one faculty member,

I think [the university] is very proud of its liberal arts tradition, and even though there are some struggles, like with many universities, in trying to balance a liberal arts curriculum with some of these other more focused curricula, I think they do value that. It's also a university that I think has valued service and those kinds of things, and I think by

extension service gets into a lot of those tenets of humanities, and how that's being expressed is different for every project, but I do think a lot of the faculty produce literature on these various kinds of projects. And so I think by extension that kind of takes it to the next step of looking at it in a bigger way.

Another faculty member reflected on the university support, stating,

It has a major liberal arts component and we've done some work throughout the university that tends to reinforce the use of liberal arts in our program, but I think it makes it easier because the institution embraces the liberal arts and the connection with liberal arts to the sciences. I think there's an underlying... I'd have to go look back and look at their vision statement, but I think there's an underlying acceptance, recognition and acceptance, throughout the institution that the liberal arts and the humanities are important components of the sciences and medicine. I know the medical school embraces that as well.

Evidence of the institutional value of the humanities can be found on the university's website. The university states that its mission is "to create, preserve, teach, and apply knowledge in the service of humanity." It lists as part of its mission:

A commitment to humane teaching and mentorship and a respectful interaction among faculty, students, and staff, open disciplinary boundaries that encourage integrative teaching, research, and scholarship, a commitment to use knowledge to improve human well-being, and a global perspective on the human condition.

University Atmosphere and Culture

The university also appears to have an atmosphere which reflects its mission. Many of the students interviewed made reference to the overall "feel" of the campus when explaining why

they chose to enroll, referring to characteristics of the university that made it a natural fit for humanities. One current student stated, “It just felt more like a holistic community, and there were so many opportunities to get involved with different schools and different groups.”

A current international student agreed, stating, “I think the feelings that (the university) gave me are that it's friendly. It makes me feel like I could easily be part of it. But it's also very cozy. It was a good combination of accessibility and being cozy.” A faculty member echoed this feeling of belonging, stating, “In the interview... it felt like home to me.” Speaking about her campus visit for her admissions interview, one graduate said,

I knew they mentioned reflective practice, which I thought was really pretty critical, because it was probably one of the only grad schools I had looked at that had any type of inflect of the liberal arts. All the other programs I looked at seemed to be traditional PT programs that emphasized the hard sciences.

One student talked about the draw of the journal, saying, “For me a big thing also in developing my own sense of what my story was, I was really drawn to their initiatives in the [journal].”

Another student who chose the institution for her undergraduate studies and again for her physical therapy residency stated,

And when I came and visited, I just really liked the diversity of the campus, and there's just a lot of things going on here, and liberal arts has really been important to my family. Both of my parents went to liberal arts schools, and they really stressed that from the beginning. And at schools that have a lot of science programs, they push that agenda a lot, so I was glad that my parents were like, “no, don't do it that way,” and [the university] had a lot of requirements for taking different types of history classes in their

core curriculum. I felt like it was more varied than some of the ones I've seen in the schools that my friends go to, so that was important to me.

A graduate who is now a faculty member added regarding her admissions visit,

When I came to visit the school, what really gripped me about it was just kind of the openness and the warmth of the faculty compared to other schools I had visited. It was just very easy to talk to them, very open dialogue, and I felt comfortable there.

Interviewees also spoke about the resources, events, and diversity initiatives on campus as ways in which humanities are supported. A faculty member highlighted “some very senior faculty,” a “well-established program,” “an academic medical center with a lot of resources, “an ethics center,” and the online journal as resources which allow humanities to flourish. One student stated, “We have an amazing museum on campus. It's very common to have question and answer sessions, to have videos and discussions afterwards... they offer a lot of these things just in general.” Students and faculty talked about one such museum event which was occurring two weeks after the interviews took place. As described by one faculty member, the event featured photographs taken by a physician that were being juxtaposed against works of art in the museum. Health science and medical students were invited to take place in a discussion event about the exhibit. Several students who were interviewed mentioned that they planned to attend the event.

Another student also discussed the wide variety of events on campus which bring students together to dialogue and see other points of view. This student explained:

I get emails about the events happening on campus and there's always something that may be slightly politically charged, but it's a movie night in order to discuss LBGTQ rights, or things like that. I think [this university] is very similar to a lot of schools such that they still have these politically or medically or legally charged conversations, but in a

way that's not just let's debate back and forth, but let's read an article, or let's watch a video, or there's a song that I listen to, maybe think about it, let's listen to it and discuss it.

One faculty member described the university as an ideal setting for humanities integration:

I think also being a private well-funded liberal arts college there is that element as well. So I think sure, it's the opposite of the perfect storm, it's the perfect natural elements came together, and it was conducive to cultivating some of the things you're describing and asking about.

The faculty spoke strongly of the ways in which the university promotes a culture of humanities.

And I think being on a campus like [this university] then, it's so diverse and so culturally rich, it just lends itself to these conversations. I mean you see these things all around you whether it's sustainability efforts from a conservation perspective, or religious diversity, or free meditation or whatever it is... that's what sort of gives people outlets for these things. I think [this university] is just sort of this wonderful open place... I recognized even when I was a clinician that [this university] was still a place that aligned with my values for the international service and reflection, and that's something that I felt like really aligned with my own personal values even as a clinician.

Another said, "I think what makes it easier here is that- is it the chicken or the egg- is just knowing that it's part of the culture."

Interdisciplinary Collaboration

Several graduates and faculty members discussed the strength of interdisciplinary collaboration on campus. Speaking about a collegial atmosphere throughout the university which lends itself to interdisciplinary collaboration, one faculty member said,

I think one of the best things about [this university] is the culture. It's extremely collegial. I think people generally get along and like each other, and so, yes, there is that definitely that sense that you can reach out to your colleagues across campus from different schools and they're willing to hear you out and share some ideas and things like that... the Center for Faculty Development and Excellence has always been there and you go there if you need some help with your pedagogy, how to write course objectives things like that, and over the years I know they've had courses on teaching and learning, things like that. And I've just gone and attended those. A lot of them were folks from the liberal arts colleges and I was the lone health professions guy sitting in there, or maybe one other, but they always welcomed me, and I loved to listen to how they approached pedagogy and things like that. So I think the university has created support systems for people, and it really is to you how much you want to take part of that.

The interdisciplinary collaboration on campus can be seen very clearly through an initiative that took place in recent years. The university supported the integration of liberal arts across humanities and science courses was through the formation of Coalition of the Liberal Arts (COLA). As explained by the physical therapy program director:

A few years ago, you know, there was a lot of hand-wringing going on around the nation where people were questioning the importance of a liberal arts degree, you know, what good is a liberal arts degree? You know, people said you're going into debt- you might as well get a degree where you can get a job. And so [the institution] was kind of wise enough that they appointed a commission on liberal arts to look at the whole importance of liberal arts, and they actually found the importance of liberal arts.

Describing how a physical therapy faculty member became involved in COLA, the director further explained,

There was an email sent out that they were really going to promote having those kinds of courses that focus on integrating the liberal arts, and I don't remember how it was worded, but that was a whole university initiative that he and some others just jumped on to work together, so I think the university puts these things out there, or they'll have small grants or small stipends for trying to do some different pedagogy or just some interesting collaborations so I think the university definitely drives that as well...

The faculty member who taught in the interdisciplinary course talked about his experience:

It was an impetus that came out of the provost's office for individuals who were interested in liberal arts to develop unique and innovative liberal arts types of courses to disseminate throughout the university. And it was funded, so we got a \$25,000 grant to teach a course called "Disability, Resilience, and the Mortal Self,"... those were two really, really rich experiences I had about taking the liberal arts and thinking and talking about it through the lens of health science.

Physical Therapy Departmental Support

According to both the physical therapy program director and a senior faculty member, the use of the humanities in the physical therapy program did not stem from a direct initiative. Rather, it appears to have started organically based on many factors. The program director credited the beginnings of it to the physical therapy faculty responsible for launching the entry-level program in the 1980s, calling them visionaries because of their curricular design. Several of the faculty members interviewed also credited the beginnings to a fellow colleague who had a research interest in the use of narrative and was the first to introduce it into coursework. Finally,

faculty stated that integration may have grown from the combined interests of several faculty members who were “champions” of the humanities. In the opinion of many, the program’s involvement with the humanities was solidified by the creation of an online journal which integrated humanities and rehabilitation science, as well as faculty involvement in the university initiative called COLA.

Physical Therapy Faculty Selection

All subjects interviewed agreed that a significant factor in the success of humanities integration is the support among the faculty within the Division of Physical Therapy. According to one student, a tone was set within the department from the time of their first visit to the department:

I did get a sense from [faculty names] that they really threw their personalities and interest in us as people into their work. So I didn’t necessarily recognize that in the moment but thought they really seemed like invested people into us as individuals coming into the program. Later on, I understood their backgrounds and why they expressed themselves that way, and I think it had to do with the humanities.

Others spoke about the purposive selection of who is on faculty: “And I do think because it’s a large faculty, and because of who’s there, no doubt. They’re gems and they do shape the way the curriculum kind of unfolds to include something like humanities. Another faculty member noted how recently hired colleagues seem to fit into the culture of humanities, stating, “I think some of the faculty that we’ve hired have had those sensibilities too; they tend to be more well-rounded, sensitive to the humanities. So I think from [the director’s] standpoint, he looks for those kind of folks that are more open to that.” The purposive selection of humanities-oriented faculty also was mentioned by a seasoned faculty member:

But I also think that we need to look for faculty who are more well-rounded in certain areas with less focus on the technical rational aspects of treatment. So for example, we're looking for a replacement for one of our orthopedic faculty, and there's nothing about the humanities on their CV. They don't even talk about it on their cover letter, you know, so it's not even in their, on the radar. So I don't know how to get from point A to point B. I think we just need to- there need to be faculty to keep talking about it with students, keep integrating that into the classroom discussions, maybe use readings. I think it's going to be up to individual faculty to do that and make that commitment, and there are faculty out there who are doing that... I think it's really important that institutions look for well-rounded faculty who have some of that background and who can drive it. Otherwise, it's not going to resonate, it's not going to penetrate to the students.

A graduate of the university showed awareness of the thought that goes into faculty selection, stating, "So I think that that's one thing [the university] does well, is it finds the right people to do it, and then creating a group of people that experience it and want to preserve it and to pass that along."

Physical Therapy Student Selection

The purposive selection of the physical therapy students was identified by many interview participants as a very important factor in supporting the culture of humanities. According to one faculty member, "I think we look for well-rounded students. We take a lot of different majors. We take history majors, literature majors, art majors, dance majors. We do take eclectic; of course, the majority still tends to be exercise science." Another faculty member described their philosophy towards student selection as being a long-standing tenet of the department:

The other thing that was really foundational in my mind is that we took students from liberal arts backgrounds, so people that were English majors, anthropology majors, we've always taken into the program. Of course they got the prerequisites, but we always had a history of admitting those students. So in that sense, historically this was there.

Discussing why interviewing potential students is integral to setting the tone they seek within the department, a faculty member who is part of the admissions committee said:

I think during the interview process, we look at people who are thoughtful, who reflect, who think through what they're talking about, who respect others, because we do group interviews, who seem to have a better sense of what patient-centered care means, that patients are human beings. I think we do look at that, which is why we don't want to give up the interview process. You get a better sense of these individuals as persons and their commitment to care and what that means. So we have certain set questions we ask- what is the most challenging experience you ever faced as a PT aide or a volunteer, and if they say silly things-some of them just say the dumbest things- but others talk about it from a patient's perspective, and they empathize with the patient, and they learned something from the patient- that goes a long way... but if we see a student with a lot of strong qualities and then they have a lower GPA, and then we see a student with a high GPA but not such good qualities, we might take the student with the lower GPA... if you go by GPA alone, you're going to run into trouble.

Another faculty member reiterated the importance of the interview when selecting a cohort, also highlighting the fact that the interview visit allows students to decide if the university is the right fit for them:

We do interview, and I hope we never lose it. We definitely have discussions in faculty meetings about whether or not it's the best use of time, but that face-to-face, we really get a sense of them. And I'm on the admissions committee and I go through every single one of them, and we do look at the whole package. We look at the letters of recommendation, we look at the experience, we look at the whole thing- the whole person, the essays, and... We also really show them who we are as a program so the decision feels so mutual by the time it happens, because I think unless you come to campus, unless you meet the faculty, unless you unless you hear that face to face, students really can't make a good choice either. Students really don't know the heart of the program if they haven't been there, so I feel like it's really important to the process of inviting them to campus and looking at the whole package and not just being driven by numbers is very valuable. I don't know that anybody on paper could say that our students are more successful than anybody else, but it's a different way of building diversity within your cohort.

Students echoed the value of purposive selection of a diverse cohort:

[The institution] had the least amount of prerequisites of any school, which I thought was interesting because they are one of the highest ranked PT programs in the country, and I kind of pondered why such a high ranked PT school would have so few prerequisites if they weren't so strict about who they accepted and if they wanted the best of the best and it's how they stay up there, and it made me appreciate the fact that they appreciate the individualism of each of their students and they appreciate how students with different backgrounds can bring something unique to their program. I thought it was a huge reach but I thought I'll apply. I don't know if they'll be into this anthropologist from [home

state] thing but let me give it a shot because I do think I could bring in individual perspective to the program that maybe they hadn't had before because of anthropology.

Interviewees also made reference to the other perspectives provided by the types of students admitted into the physical therapy program:

I know personally in my class we had several individuals who were doing PT as a second career, so I know in class projects that they would look at problems completely different than a pre-science or pre-PT student would. We also had two students that were art majors, and so their discussions and viewpoints were just so interesting perspective because you didn't have this cookie cutter student, you didn't have all students that had all 'A's on their prereqs or really heavy science research projects.

Program Director

The director of the Division of Physical Therapy was credited by faculty and students as a driving force in support of the humanities. Many faculty members identified his leadership as a key force in allowing the humanities to flourish. One person noted his presentation involving humanities at a national physical therapy conference last year as well as his backing of the journal as important ways that he helps to promote a culture of humanities. As one faculty member described, "...and then the spaciousness that [the director] allows people to explore their interests. He's not a micromanager. He wants people to do well and to thrive." Another said, "I think he's definitely been supportive. I think that resources are always challenging, but I think that conceptually he's very much on board and values the humanities as something that's important to our work." One faculty member credits not just the current leadership, but also those who preceded him, with allowing the humanities to grow, stating, "I've been here a long time, and I've been lucky enough to see that under [the previous two and the current directors],

but I think what they do is, they allow their faculty an opportunity to flourish. They don't set restrictions. They don't clamp their wings.”

The students also expressed awareness of the role that leadership plays in allowing the humanities to thrive. One graduate mentioned the impact of top-down support of humanities, stating that [the director] makes it very possible for faculty visions to become a reality. Another student noted that the leadership has created a lasting culture:

And so I think what allows [the institution] to do that is we have really good leadership, and I mean that by, well, for one, [the director] is a very impressive person and he is a very well-studied person, as well as knowing what ideas to bring to us or what is just going to develop if you just have the right tools, and I think he's done that right. I know they've had a lot of faculty changes here in the last year since I left, but I don't think that's going to affect it at all because it's just the atmosphere that they've created.

Another student spoke of the way in which the leadership supports faculty:

...I think having that diversity and difference in backgrounds along with an openness to allowing those people to kind of go and push out and pursue what they care about, I think you can't help but, I mean, people, especially people who have been cultivated throughout their lives to want to create, are going to naturally flourish. And I think the best thing you can do, I mean, it's about creating an environment, where you don't necessarily tell people how they're going to be creative, but you allow them an opportunity for them to express that creativity. And maybe if it's not quite there, you ask them how can you, where can you grow? What would you want to see yourself doing down the road?

The program director himself discussed the support and resources made available to the faculty:

[The institution] is blessed with resources, I will say that. But a lot of things- I mean the faculty have gone and talked with folks at the ECDS, the Educational Center for Digital Scholarship, and they've talked to them about what resources they have available. And then they've come to me, and I've supported from my budget what I can. Like if they wanted to go to a meeting that has a humanistic bend, I've supported that. I also allow- I give allocated money for each faculty member to pursue whatever they want in terms of their development, and so that's always available to them. So I don't think it's so much of a resource issue, it truly is interest, and a place like [this institution] is large enough that if you have a strong interest you can bring it to fruition.

Although the program director stated that he has not explicitly asked faculty to increase the use of humanities in their courses, he made reference to the way in which he tries to develop faculty:

One of the things that I'm sort of doing a little bit, and I need to do more, frankly, is I like to give books to my faculty to read so that they also have sort of a broader vision about things- so they are not just focused on physical -of course they need to have that expertise- but they're thinking broadly. And think my role as a director is really to show them that there are all these other things that are happening around us that we really do need to be paying attention to. You know, we're all just logged on to the silos of our own professional expertise.

He went on to say:

I think leadership matters. You know, sometimes when people find out I'm a director they say, oh my god, I give you condolences that you're a director. But I've thoroughly enjoyed myself because I feel like there's so much good you can do, right? And I like to

think broadly. I want to think what's coming down the pipe and what the future of our profession could hold. And to me, it's no different than teaching, really. So my students are my faculty in some ways, so to speak, and anything you can do to help them develop, it makes you stronger as a program, and you know... So I think leadership really matters, and I think we as a profession need to think about this. Who are our leaders and what are they thinking about? Can we give them some tools to think more broadly and stuff like that? So I think leadership matters.

Faculty Leaders and Mentors

In addition to the director, credit to several people within the faculty was also commonly given by other faculty and students for creating a culture that emphasizes the importance of the humanities. In the words of one current student:

I think a lot of it is having strong leaders in the faculty, having individuals like [two faculty members and the director] who already act as mentors, just because they naturally bring it up in conversation where you start thinking about, 'Oh, I never thought of it that way,' or 'Oh, I can really see why thinking about disability is important' or 'Why I should indulge in this book?' I know that even in [the director's] class, which he teaches for first years, in my notebook I actually had written down different books, because in his lectures he would mention a business book, or a book about communication that somehow related to his lecture- he would say you need to read this when you have time, and he probably recommended over fifty books in the course of just a regular lecture. And I think as a student, I'm not sure they do this for onboarding faculty, they actually give two books with your orientation packet, and then for graduation they give the book *Better*. And I think that kind of shows the importance of the humanities within it. They

kind of already set the tone for students. I'm not sure if they do that with faculty, but I'm pretty sure they do that for new faculty as well.

Another student credited the mix of faculty with supporting a creative culture in the department:

You know, I think we have such good leaders in our department, people who have come from such different backgrounds... We have a little bit of everything. And that in itself brings different experiences and different approaches. And it doesn't make you feel like any way of thinking is wrong, so it lets you explore. And I think that's the beauty of PT in itself, that there's not one way to do something, there are many ways to go from point A to point B with every different patient. And I think that's the part where a lot of PTs who are out there who don't feel satisfied by their jobs haven't discovered yet.

A graduate echoed the importance of the current faculty in cultivating the use of humanities within the program:

I think the people that drive it are so important, because it's a fight, and the ones that I know that are doing it well have to fight a lot. It's not going to bring in the level of money and prestige for the reasons that we just talked about, because it's not just in PT schools, it's the world. The hard sciences tend to get this extra level of recognition or credit.

Faculty credit the support of both the director and the university culture with allowing them to flourish. One stated, "I just come here and I feel like we've got this open wall, this open whiteboard that allows us to have, within faculty, creativity." As expressed by another, "I feel like [the university] has a culture that was really important for being one of the launch pads and I think embracing and integrating something many, if not most, PT clinicians would say is vital to good practice, and that is that humanities piece." Speaking of her personal experience, one newer faculty member explained,

I think what makes it easier here is that- is it the chicken or the egg- is just knowing that it's part of the culture. It's coming into this as a faculty member, and with [faculty name] as my mentor, it just seems like the natural way to do things, but I think what makes it easy is knowing it's supported. I think knowing that it is valued and supported gives me more confidence to create activities and assignments with the humanities, knowing that they will be valued. And what makes it also easy is knowing that we have a lot of freedom within our courses, to kind of, as long as we're meeting the objectives that have been kind of established or that are established, and there's a lot of ways you can do that. And there's a lot of ways you can bring humanities in while still meeting those objectives that are kind of outlined on the syllabus, so I think just having that freedom for creativity to meet the objectives in the way that we see best, knowing that it's a supportive culture, and then having other people around me that do it, having other people that influenced me to pull from, having [faculty name] as a mentor, having [second faculty name] also as a mentor for neuro, and her bringing the Gibbs reflective cycle, and encouraging me to do more narrative reflection in my courses, those kind of things, just having strong mentors in it... I felt that I had people that were giving me good strategies, good scientific background, behind the humanities I think that was really important, too.

Many factors on both an institutional and a departmental level were found which allow the humanities to thrive at the studied institution. However, there are challenges to humanities integration that interview subjects discussed. Barriers to successful humanities integration will be explored in research question five.

Research Question Five

Research Question Five examined the challenges to successful humanities integration in physical therapy curriculum. Although all interview participants voiced support of integration of humanities into physical therapy curriculum, they acknowledged that there are a number of challenges both at their own institution and across physical therapy educational programs. The most frequently cited challenges included limited faculty interest in making changes to curriculum, time constraints, difficulty with assessment, lack of faculty buy-in, lack of faculty comfort, and student stress and concerns.

Lack of Faculty Interest and Buy-In

In order for humanities to be successfully integrated into physical therapy curricula, participants agreed that there must be initial interest within the faculty itself. Although department and institutional leadership were cited as important components in supporting the humanities, it was agreed that there needs to be at least one person on faculty to serve as a champion for the humanities and help to integrate it into coursework. One faculty member suggested,

Once you get the basics down then I think it takes someone who has the interest, or as the profession continues to talk about humanities, which I think it is, start saying, ‘Okay, well now we’ve got the basics down, we have the faculty that we need, everyone's covering this, how do we start incorporating some of these other things?’ So it's almost a process that you have to go through.

Lack of faculty buy-in was also identified as a challenge. One faculty member who taught elsewhere discussed difficulty integrating humanities into the program at a school where she previously taught. Although this was not cited frequently to be a significant problem at the

institution studied, one student suggested that a few faculty members did not seem as invested in humanities, stating,

Maybe I just caught them in a year or two years in their life where they were going through something and I didn't know it. So it was hard for me sometimes to see some of the faculty as being part of the group of kind of that culture and sharing that, or maybe demonstrating that to us, or just showing us that they were one of the team.

All interview participants recognized that lack of faculty buy-in creates a challenge on a bigger scale, acknowledging that the overall culture of an educational institution or physical therapy department does not always mesh well with humanities. One faculty member said, "I think there are a number of like-minded academic physical therapists who think that way, but we all seem to talk to each other, and to get others to buy into it..." A graduate acknowledged what she believes to be stereotypes among some faculty about the role of humanities, stating, "And I think that's our problem- there's the stereotype of it being a therapist leaning in and saying, 'Well, tell me more about that,' not a very clear relationship of using art and humanities to explain the human experience and to show how we're connected..." The faculty member with previous teaching experience at another institution stated, "I too came from a culture where it wasn't as valued, and so I think that can be really hard to integrate unless there is this cultural acceptance of that this is an important piece." One graduate talked about the importance of faculty buy-in to make it happen:

If you have people who are mandated to do it, I think it's hard for it to be really successful, because there's a level of passion that's necessary to inspire people to follow that, and I think that's hard to replicate if you don't have people that are not genuinely interested in bringing that forward, which is hard, because how do you create those

people? And you may not be able to, you may need to find them, and you may need to give them the space to feel supported to be able to explore those things, and that's a whole other difficulty that I think I think [the university] has people here that will go down fighting for this because they think it's the right thing, and have earned the respect of their peers and colleagues to be able to voice that, and then have time and again given student experiences to back that up and things like that. So I think the precedent helps as well.

A third-year student commented on how the lack of buy-in from some faculty ultimately impacts buy-in from students:

I feel like there's challenges with that in terms of buy-in from professors and also buy-in from students. In my experience as a student, I've seen that when we've been asked to, for example, reflect on our clinical rotations or do anything that's not seen as a hard skill, it's like, 'What? How is this going to make me a better PT?' There's just been some apprehension, the attitude that it's 'just busy work' and 'it's not adding value to my education and so I'm not going to invest much time in this, I'm just going to get it done.' So, I see that, I feel like it's going to be hard to get student buy-in without the buy-in of the professors, so I think when trying to kind of sell this idea that humanities should be incorporated into PT education, it's important that you genuinely have professors on board so that it comes from the top down and can be appreciated more by the student body.

Another student discussed the observation that some faculty don't feel the need to incorporate humanities if they are already being used in other classes: "I think I can be challenging when you're surrounded with some people who say, 'Yeah, well, they get this experience in this other

class so we don't need to do it in this one. We just need to stick to these things and just get it done.”

Time Constraints

Even with invested faculty who believe in humanities integration, participants acknowledged challenges to implementing it successfully. The most commonly mentioned barrier to integration was time. Faculty acknowledged that the curriculum is already packed full of necessary content and students are in class for eight hours, five days a week. Trying to add activities which bring a humanities perspective takes time, and for some it becomes a question of what can be left out to make room. One faculty member said, “How do we integrate it in a way that's not going to have additional layers of things to grade and things that would take away from my content, right? So that's the biggest barrier, rather than skill or willingness.”

A new faculty member and former student who is trying to find ways to incorporate the humanities to her course described her difficulty:

Students are going to class from 8-5, and the interventions content is pretty extensive, and so when I was looking through the syllabus I couldn't find, I couldn't structure my time accordingly to embed it into it. So I think the amount of content that a doctorate level program requires makes it very difficult to embed humanities into already structured courses. You definitely need a lot of support from the program director.

A seasoned faculty member added, “We're still trying in some ways to figure it all out- the curriculum, the priority of what we teach given the limited curricular space, and I don't think the humanities really ever comes up as a priority at this point in time.” Lack of curricular space was acknowledged by another faculty member, who said,

We did more of that [using films], and it's kind of gotten pushed out. We had a couple of things inserted into our class... and it's tricky to make time for everything, so we sort of had to cut some of those things, and I'm afraid that's what got cut. We felt that the other activities we were doing regarding the humanities were maybe a little bit more directly impactful for clinical care. It was a decision we had to make.”

A recent graduate also showed awareness of the constraints faculty face:

My faculty are fighting the system of ‘well we have to teach them these things because they have to chest on them on the boards.’ My clinical instructor is like, ‘Well, I have to teach them these things because these are the skills that I have to check off and once I get into my job. Well, I have to do these things because I have to see 12 patients today.’ So I think that if we stay within the mentality of everybody fighting the system and, ‘Oh, gosh, we only have nine semesters to teach them all of this to pass their boards and go out there and be entry-level clinicians who still have to study their tail off every day to make sure they walk in competent the next day,’ I think we're never going to see humanities rise above anything or reach any level of importance like those other skills have.

Despite the faculty concerns, the department director makes the argument that faculty should not feel limited by time when trying to incorporate humanities:

There's always the whole thing about curriculum creep and stuff like that, but again I don't see humanities as a separate thing. It is something that you do as part of your course, that something is built-in. Sometimes you can be doing a discussion on aphasia, or something like that, but you can explore, and I mention they about how it might impact a person. Now you could talk about the disability resulting from it, but it can lead to so many things of what it means to be a human. Does it mean to be able to express yourself,

things like that? So in terms of challenges in the future, I don't really see this as you have to build-in or add in or make it a separate course. It is an attitude, you know. And it's something that you as a teacher deem into your class. Now obviously it depends on the teacher to write, and to that extent, and I think the biggest challenge would be able to attract faculty who have that broader vision.

Assessment

Another barrier mentioned was the difficulty setting objectives for the use of humanities or knowing how to assess them. The Gibbs model is used to assess narrative, but faculty were not able to identify many other ways in which effectiveness of humanities use is demonstrated. Although anecdotally faculty may feel that the addition of humanities creates a stronger clinician, they agree that it is difficult to measure their impact. One faculty member pointed out the pedagogical challenges, saying,

Where do you put it in the curriculum? How do you package it so that there is a lot of clarity around, for example, what the learning objectives are? And how do you design it in a way that make those objectives and goals accessible to students and compelling, and that move beyond just an exercise, and I don't mean exercise as in three sets of ten, I mean exercise like a mind activity that they are willing to really dive into, move beyond from the surface of just completing it?

Another faculty member who uses humanities frequently in her courses expressed the difficulty with assessment and the desire to find better methods:

It's really hard to talk about it, to find the language for it, so I think I would love to see more structured work on it, and more out loud conversations in our professional forms, so we can get better. I think the more we talk about it, the more relevance it will hold, and

the more emphasis it will have. I think it's just been that sort of behind the scenes ingredient, so I appreciate getting into it more formally, maybe finding ways to do it better and more efficiently.

Faculty Comfort

Whether or not a faculty member buys in to the importance of the humanities, there is also a limitation created by faculty comfort levels with using humanities. Resources at any given institution may not be sufficient to help a faculty member who wants to bring humanities into the classroom but doesn't know how to do it well. One faculty member suggested, "I don't think the faculty, or a number of faculty, are in the position to integrate humanities because they don't know humanities." Another faculty member acknowledged that "in some programs, they either don't have the diversity of faculty, or they don't have the resources to help fund something like a journal." One person suggested that it would be very difficult for a novice teacher, stating about her own growth, "I think at the beginning it's easy to get super fixated on the facts, just like they are, and so I think I've relaxed into being able to incorporate those a little more freely, not just in the structured assignments but in the classroom discussions."

The department director acknowledged that integrating the humanities, especially for a new teacher, can be difficult:

You know, there's a lot of maturity that has to happen in a teacher, too, you know. I've been teaching for a while and I've seen myself go through a growth in my own teaching, and I see some junior faculty, and I can see myself when I was at that stage, and how things have now become comfortable. But in some respects, they are still not comfortable. How can I hasten that process? Yeah, that's something I need to give a little more thought to.

Student Time and Stressors

Students voiced their own list of concerns regarding how much the humanities should be used in their curriculum. Lack of time in their schedule was mentioned by every student and graduate interviewed, and faculty acknowledged that busy schedules were a concern for students. One student, when discussing if humanities opportunities such as films or art exhibits held in the evening should be required, stated,

I think part of the reason that they don't require things like that is because it is out of class, and it is already so grueling. Now we don't do eight to five every day as much, but in the first year you're eight to five every day, which is part of what happens at [this institution] because we just have a lot more credit hours than other universities, which is okay because we learn a lot, but it makes it more challenging to do these beneficial activities in that first year.

A third-year student reflected on her initial disinterest in humanities due to busyness, stating, "I think I was just kind of lost in the world of studying in the first year or two." Another student explained that classmates' focus is often on "the licensure exam and just needing to get through the curriculum that's required of everybody in the PT program."

A faculty member acknowledged the students' concerns and the barriers which they might create towards humanities integration, stating:

I think they get to school and they're stressed out; the curriculum is jam-packed and it's only gotten more so. There's a tremendous amount of anxiety that students come to school with now whether it be due to debt, and I went to a great talk by a psychologist who was a new director of their counseling program, and she said, 'you know, we're seeing the data shows that students are by-and-large coming to counseling because of

anxiety. It used to be more depression, but now it's anxiety, and the threshold for what they define as a crisis is much, much lower than what we're used to.' So there's already this heightened anxiety, perhaps less tools that they feel they have available to manage that anxiety. And then they come to a curriculum where they're in school from eight to five, and then they have exams to study for and projects to complete. They don't eat well, they don't sleep well, and they don't exercise, and they have no way of managing that stress. And so then you add on, well, some people would think it's a breath of fresh air, but it's just like, 'Oh, this is one of those softy things. I just don't have time for this. I have an exam to study for.' All these other things they're trying to deal with, and they lose sight of why they came in the beginning. You know, they're completely overwrought with work, and I think we have some work to do, obviously, with how much debt they leave with, but also with the expectations that we place upon them. We keep telling them, 'no, you need to keep exercising and you need sleep and you need to get out and exercise,' but I've walked with a student, and she's like, 'When do I do that, I get up at six in the morning. I get to school early so I can study. I go to class from eight to five. I have to then drive home, which in [this area], that can be an hour, then they have to start studying. They try to grab something to eat, they stay up till two in the morning. I mean, there was one student that I had that was sleeping three to four hours a night. So do they continue to make those connections? Hell, no. They're just like, 'We want to get through and pass this exam.'

Another faculty member discussed the challenge of using the humanities in a program where students are so heavily focused on their grades, stating,

I find when it comes to test time, all the things that I brought in about the humanities go out, because they're worried about their grades, and what I can do then is as a faculty member say, 'what's the most important thing that you focus on at graduation is- get your PT license and help all those people I brought in [for the panel]. This is a grade, you have to learn the material, but if you're so anxious about that, you're going to forget what the big picture is, and the big picture is hands-on helping, caring for somebody.'

One student talked about the effects of being overstressed on how they process information:

I think it's really easy for the students to get sucked into 'I have to read this' and 'I've got this assignment' and 'I have lab tomorrow.' I don't think they sit back and think about why they make particular decisions or why this affected them a particular way or what will they do next time instead of saying, 'Wow, that was a terrible situation,' and moving on, or 'I didn't handle that very well' or 'Wow, I did a great job' and then it ends there.

Another student, reflecting on their classmates, said,

Not all students appreciate value of the humanities. They focus heavily on grades and don't see the value in activities which don't directly impact their grades. Some students can't prioritize- they always feel like they don't have enough time for the extras. Some struggle if they don't see the direct connection to the patient populations they intend to treat.

Several students talked about the stress of school debt. One student added, "If you are concerned about people getting the most that they can for the most affordable amount, and moving them on as quickly as you can, you're going to start making cuts in areas that don't seem as critical."

Regarding humanities, a student said, "I think it's deemed important, but sometimes it ends up getting put on the back burner in an attempt in order to get as much medical knowledge as we

can...” Another student explained why students might be resistant to engaging in humanities even if they value them:

...I think that a lot of students within the PT program have a similar perspective as I tried to take when I came in here, where it's just focus on your school work, keep your head above water, and just keep trucking, and so somehow I ended up with all these other involvements with other things, but some people, they may be very interested, but they're trying to stay very focused on their school work because it is a rigorous program, so they don't... they might be scared to add on an extra commitment to something else in fear that it will hinder their progress in the department.

A faculty member addressed this student concern, citing that students cannot see the big picture:

Depending on where they are the curriculum- I mean, in the beginning of the curriculum they haven't been to clinic, they haven't interfaced with patients- so they don't really understand the impact of the relational aspect of patient care... They don't really understand the process at that point in time, you know. I think at the point in time you introduce, you have to get them to buy into it slowly, so ‘Why do you want us to write these stories, it's just extra work? What do you mean by reflection? I think all the time.’

Another student suggested that student attitudes towards the humanities can be largely dependent on how they are used:

I think the biggest thing against would be if it were a lot more time or work. But if it was just a short discussion in class or a group assignment with a patient and a case, if you can still keep it kind of on that scientific level that they're comfortable with, but slowly adding a little bit in, I think that they would be open to that.

Challenges Within the Profession of Physical Therapy

Interviewees spoke about the profession of physical therapy itself when discussing challenges of humanities integration. An observation frequently mentioned was the relative newness of the profession and the thought that it is still trying to define itself. One faculty member said, “I also think we are a younger profession and we just haven't evolved yet,” while another suggested, “I think we've been too busy trying to prove ourselves as a profession, and so the emphasis has naturally gone towards the harder sciences.” Discussing why medicine and nursing have embraced the use of humanities more than physical therapy, one faculty member offered:

I think you look at how long medicine and nursing have been around. They've been around for a very long time. So if you look at the scope of the history of their practice, they just got into a lot of the humanities and the narratives. It's not that many decades ago, maybe in the last two or three decades. And so you consider PT is really in the grand scheme of things still in our infancy, maybe we're heading into our toddlerhood. We may be five to ten years behind medicine and nursing at looking at some of this, but I think we also had a bigger job given where we were in our profession and developing our profession and helping to see that other health professions respect our professions. So there's been a lot of time doing research and looking at those technical skills and things like that, and as we transition relatively quickly again in our history, from certificate to bachelor's to Master's to Doctorate, has been time that we've been having to deal with all that, and so now curriculums are still adjusting or making an adjustment, and then we're throwing in direct access and things like that, and curriculums are still having to make adjustments, so I think our profession has had to spend a lot of time getting to a place

where we were kind of consistently covering what makes us PTs, that now we can sit and think about how we can do this better. I think even when you're a new faculty member, whether or not you're coming in as a clinician or as an academically educated academician, that first couple of years you're just trying to get the basic content in your course and delivering that in a way that you feel comfortable, and then you sit there and think about how I can do that better and think as a profession, how can we do this better? That's where you're starting to see the humanities come in.

Another faculty member talked about the professions' bias towards quantitative research as a barrier to gaining respect for the value of humanities in physical therapy education:

You know, I think it's also perceived, because there are many academic physical therapists who are still perceived as second-class citizens, that the humanities and qualitative research or soft sciences that emphasize lack of seriousness, you know, on the part of the academic faculty to do high-level quantitative research and publish in those types of peer-reviewed journals that just look at quantitative research.

Suggesting that lack of evidence for the outcomes created by use of humanities was one of the reasons that their use has not become the standard, the same faculty member continued:

...the other problem is there's not enough PTs doing writing for those particular journals. In Academic Medicine, I've never seen a PT article in that particular journal... But I think that it's just there's just not enough faculty who have the training, and they're not eclectic enough, so I think that's part of the problem.

The program director also identified the profession's need to show hard evidence for outcomes as a barrier to humanities use in the past, saying,

People always question about evidence for what we do, so our entire focus has been to establish the scientific foundations of a profession starting in the early 70s with the PT Foundation for Research. And we've come a long way now. There's no longer a question of what in physical therapy is working or not working. We have evidence on so many different things. So it's not surprising in some ways to see some buds of humanities sprouting, and the fact that you're doing your dissertation on it, because I think we've reached a level of comfort with our science that now we feel rock solid and we can explore these other aspects of what should be something that we ought to look at. That's my only reasoning of why we are slow. I think we've seen established enough of the evidence for what we do as PTs, so I think that it's appropriate that at this time we will see the evolution of the humanities. We make strides. I think that healthcare demands it. I think people want more patient-centered care. Patients are going to demand it. So I think we'll rise up to that occasion.

Providing a different perspective, one faculty member speculated about why impact of humanities has never been looked at more formally:

We are so naturally connected with our patients because we spend so much time with them, I wonder if it's not because it's such a core part of what we do as a profession, it's a shame that we don't study it, but I don't know that it's been ignored. It just hasn't been documented, if you know what I mean.

Despite the challenges to humanities integration discussed by interview participants, all agreed that integration of humanities into physical therapy curricula is an important and beneficial endeavor. Many participants shared ideas for helping to increase the presence of humanities throughout physical therapy education.

Bringing Humanities into a Curriculum

Faculty were asked what their advice would be for a physical therapy school looking to integrate humanities into the curriculum. Responses reflected similar themes: identify a faculty member interested in and willing to coordinate the integration, start slowly and simply, look for an activity that will create enough impact to inspire more buy-in, and have someone on faculty with a passion and commitment for humanities.

One faculty member suggested that it is important to have a “champion on faculty” who is willing to take the lead on ways to increase humanities in the curriculum. Another faculty member gave a similar response, stating, “I think it starts with someone who is passionate about whatever aspect of the humanities that they like, and then starting small, and having small successes, and then seeing that they can build upon it.” Starting small and looking for activities which have a high impact were repeated by another participant: “So maybe doing projects that don't require necessarily a tremendous time investment, but give a lot of impact for the investment, is almost necessary, because you have to see the relevance before you're going to invest a lot more in it.” The program director agreed with the recommendation to start with something small and suggested involving the students when generating ideas:

Start small, start small... I would say ask the students, ‘How can we bring more humanities into the curriculum?’ and they’ll give some ideas. You'd be amazed at how tuned students are to different things.... So I would say start small, start some experiments. You'll don't have to think, “Oh, one more thing I have to do.” Just build it in into something that you're already doing and see how it goes...

One faculty member also talked about the importance of support from leadership.

I think it has to come from the top down, so I think there has to be a commitment and buy-in from the faculty. So one thing I think has to happen is that faculty has to appreciate how the humanities can impact the development of their students in the way that they think is going to be the most effective for patient care, and then I think they should do it incrementally. Don't do it all at once, but start bringing in certain examples of literary works or philosophies that can emphasize certain points that they're making, certain ideas that they want emphasized, and they should all make the commitment throughout. So I think that's where it could start- it starts at the top, it starts with a commitment to faculty.

A faculty member who had previously worked at another institution talked about her experience trying to introduce humanities into the curriculum:

What I've learned in coming from a different type of culture is that big abrupt recommendations or changes don't usually go over super well when you're trying to change culture, and so it can be hard. I felt like a little bit of a fish in my own puddle, because I was super excited about this idea of humanities, and coming from that place, and coming from a bit of a naive place, thinking that everybody is excited about the human experience, everybody should be excited to hear what students have to say, and think about their own perspectives on disability and recovery, and I was sort of taken aback when it wasn't that way. I think what would have been more successful, maybe, would have been to practice what I preach, which I did, in my own courses, but then set aside, or request time to set aside, some time for dialogue about humanities, and maybe do an inservice or educational session, or bring in another person to come and talk about humanities. I do think it's challenging, but I think it happens in small steps, and I think

showing success with the things that you've done, so if you're practicing what you're hoping to expand and showing the success, it will come through.

Finally, a faculty member offered an approach to faculty who are met with resistance if they propose bringing in humanities:

Ask the fundamental questions first to see if someone says well our curriculum is already too full. All right, so there's no human in physical therapy? And so I would want them to do self-assessment to really see where they see their curriculum going if they don't have a human part of it.

Summary

This study sought to examine the use of humanities in physical therapy education by performing a case study of one institution which has demonstrated leadership in integrating humanities into its curriculum. The study found that the physical therapy program is very engaged in the use of humanities, incorporating some type of humanities related activities into all major content areas. Narrative reflection, guest speakers, experiential learning, use of film, literature, and fine arts, and publication of an online humanities based journal are the primary methods by which the program is incorporating humanities. Pedagogical approaches such as repeated exposure, being explicit about the benefits of humanities, making activities relevant to students, keeping it simple, and being sensitive to student time constraints were all cited as ways to be effective in humanities integration.

Faculty, students, graduates, and the chair of the program were all found to be very supportive of the use of humanities in the program, although several students and graduates discussed the evolution of their attitudes from the time of the initial humanities exposure. All participants were able to identify numerous benefits and outcomes they perceived from

humanities use, including attention to patient-centered care, development of soft skills, development of reflective abilities, formation of professional identity, cultivation of well-rounded clinicians, and creation of transformative experiences were all discussed. Regarding assessment of humanities' effectiveness, faculty concurred that it is very challenging and that the best method used at this point is analysis of narrative writing using the Gibbs Reflective Cycle. All subjects agreed that long-term studies are needed to show the true impact of humanities on clinical practice.

Many factors were identified which help to support the integration of humanities in the program. At the level of the institution, commitment to its liberal arts tradition, campus culture and atmosphere, resources, and interdisciplinary collaboration were named as factors in the support of humanities. At the departmental level, faculty and student selection, support of the program director, and presence of faculty mentors were all identified as important to allowing the humanities to develop within the program.

Challenges to humanity integration were discussed, with the most common issues identified as lack of faculty and student buy-in, limited faculty knowledge regarding how to include humanities, student stress and time constraints, limited room in the curriculum, and devaluing of the humanities by the profession of physical therapy as a whole. Despite the potential challenges, all interview participants voiced support of humanities integration throughout physical therapy education and provided suggestions of how to introduce humanities into other physical therapy programs.

Conclusion

This chapter provided an in-depth examination of the use of humanities within one physical therapy educational program. Chapter V will discuss how a culture of the humanities

was established and thrives at the studied institution. The benefits and challenges of humanities integration into physical therapy education will be addressed. Strengths and limitations of the study as well as ideas for future studies will be identified. Finally, recommendations will be made for other physical therapy programs looking to integrate humanities in their curriculum.

CHAPTER V

SUMMARY AND DISCUSSION

Physical therapy is an evolving profession whose educational demands have changed rapidly in recent decades. The standard educational degree has been raised to a doctorate, elevating the expectations for graduates to practice at the level of a doctoring profession. Increases in the amount of scientific content taught have reduced the presence of curriculum aimed at “soft skills.” According to Rabow, Remen, Parmelee, & Inui (2010), “With the rapid growth of scientific knowledge and technology, the qualities of predictability, measurability, efficiency, productivity, cost-effectiveness and objectivity have come to assume a priority equal to, if not exceeding, older professional qualities of compassion, avoiding harm, service, altruism, and reverence for life” (p. 310).

Concurrently, the need for stronger emphasis on attending to the professional formation of students has been recognized. Humanities have been identified as tools for cultivating professional behaviors in students, but many educators either are not aware of their potential or do not know how to effectively introduce and use them in their programs. To advance understanding of the use of humanities, this study sought to examine a physical therapy program that is currently integrating the humanities in its curriculum by addressing the following research questions:

1. How and in what content areas are the humanities being integrated into the physical therapy curriculum?
2. What are the attitudes and perceptions of faculty and students regarding the use of humanities?
3. What are the expected outcomes of integration of humanities and how are they assessed?

4. What departmental and institutional factors are present which support the humanities?
5. What are the challenges to successful humanities integration in the curriculum?

This chapter will summarize the major findings of the research, discuss meanings and implications of the data collected, provide recommendations for educational programs trying to incorporate humanities, discuss strengths and limitations of the research, and make suggestions for future research.

Interpretation of Findings

Research Question One

Research Question One investigated how and in what content areas the humanities are being integrated into the physical therapy curriculum. This study found that use of the humanities is linked to all major content areas in the physical therapy curriculum at the studied institution. However, a perceived imbalance exists regarding the extent of humanities use in certain content areas as compared to others.

Neurology coursework appears to integrate humanities in the most extensive variety of ways, while orthopedics appears to include humanities the least, per the description of subjects. Some interview participants suggested that neurology is more of a natural fit for humanities use due to the life changing nature of neurological pathologies for patients and their caregivers or loved ones. However, most agreed that humanities need a larger presence in orthopedic coursework, even if the connection between the two is not as obvious. The majority of subjects agreed that humanities should have equal presence throughout all curricular content areas. This view is shared by Shapiro, Coulehan, Wear, and Montello (2009), who recommend that humanities should be at the curricular core instead of the periphery to reinforce their relevance

and importance in education. Threading humanities in a balanced way throughout the curriculum may be a necessary step to increase student buy-in, as well as to maximize impact.

The background and pedagogical styles of faculty teaching in each content area may have some influence on their willingness to integrate humanities. Physical therapists drawn to specializing in and eventually teaching neurological content may have a predisposition to address the wider reaching psychosocial impact of a neurological diagnosis, a point raised anecdotally by several interview participants. Gillon (2013) suggests that among some in health care there exists a “scientific and technological and biomedical ‘machismo’ that sees human understanding, kindness, emotional awareness and talking and touching as doctoring and health care for wimps” (p. 106). However, one interview participant who strongly supported humanities use had previously earned an orthopedic clinical specialist designation, serving as a reminder that generalizations should not be made regarding which faculty might be open to using humanities in their courses.

When participants were asked to define humanities in the context of physical therapy education, a similar definition was voiced by all, describing humanities as anything that deepens the understanding of the human experience or the human element of healthcare. Some participants also included a more traditional description of humanities, naming specific disciplines such as literature and philosophy, but all included the human experience as part of their explanation. The uniformity in answers was unexpected and suggested that the program is effective in communicating its vision throughout the faculty and student body, making humanities relevant to physical therapy practice. This finding may provide an important insight into the ways in which the culture of the program supports humanities integration. The link

between humanities and patient care may have been explicitly made to the students, preventing them from viewing humanities in their education as irrelevant or extraneous.

The most common uses of humanities in the studied physical therapy program as described by subjects were through narrative reflection, guest speakers and panels, and experiential learning experiences. All of these learning opportunities fit well with participants' definition of humanities as activities which create a better understanding of the human experience. Because reflection, guest speakers, and experiential learning all involve real life encounters with people and their stories, the relevance of the activity may seem very tangible to students. Lack of relevance is identified by Shapiro et al. (2009) as a barrier to medical students appreciating humanities, so inclusion of activities which foster clear connections to clinical practice may be important to successful humanities integration. These methods also appeared to be sensitive to time constraints, as the guest speakers and experiential learning experiences were integrated with delivery of academic content or skills, and narratives were primarily used as an out-of-class assignment. This approach fits well with the recommendation of Fins, Pohl, and Doukas (2013), who emphasize the importance of using humanities to add value and meaning to existing curricula rather than to replace content. Chiavaroli and Elwood (2012) acknowledge the effectiveness of integration into existing content, but caution against humanities exclusively being used in an integrated form, arguing that it is important to explicitly give medical humanities their own presence in the curriculum.

Narrative, experiential learning, and guest speakers all appear to be accessible methods of humanities integration for other programs looking to add humanities to their curriculum due to their relevance and feasibility. However, there may be a risk that programs trying to incorporate humanities without sufficient time or attention are adding these methods symbolically but not

thoughtfully. Wear, Zarconi, Garden, and Jones (2012) caution that narrative reflection has become widely used throughout education as its benefits have gained attention, but has potentially lost its value due to faculty not knowing how to use it effectively as a pedagogical tool. Wear et al. suggest that some programs attempt to overassess narrative, potentially impacting authentic reflection because of the constraints of excessive structure to the assignment, while other programs lack the necessary facilitation by educators to guide students in effective use. Because the studied institution engages in research on the use of narrative, interviews revealed a well-planned pedagogical approach supported by the literature. However, if other physical therapy programs attempt to incorporate narrative without adequate knowledge of instruction or facilitation, it creates a risk of ineffective use. Likewise, experiential learning experiences and presentations by guest speakers should be facilitated by faculty who are comfortable with methods to thoroughly engage students and achieve the full potential of the activity.

Traditional forms of humanities such as literature and creative arts were used less frequently in the studied program than expected. In many cases these mediums were offered as optional activities, allowing students who appreciated humanities the opportunity to experience them without forcing the extra time commitment on less interested students. It is debatable if this approach is advisable to a program wanting to incorporate humanities. On one hand, even though narrative and experiential learning may not be the first activities that come to mind for many people when they think of humanities, they represent a way to make the humanities more accessible to a wide variety of students. On the other hand, lack of art and literature may limit the ways in which humanities can push students out of their comfort zone. Humanities can be used to create moments where students' perceptions of reality are challenged, which is key to

transformative learning (Mezirow, 1997). Humanities create “an opportunity to discover one’s own hidden values, beliefs, and prejudices and to challenge them” (Charlton, 2007). Although all identified activities fall under the umbrella of humanities, it is unclear if they have equal impact on student outcomes. But even if the impact is not equal, the trade-off of using activities which students perceive as relevant may be worth the potential difference in ability to create cognitive dissonance. Pattison (2003) would seem to agree, as he recommends using activities which “aim to enhance and affirm human existence and to remain relevant and accountable to humanity understood in the broadest sense.”

Creation of transformative moments is one of the underlying goals of using the humanities, and the majority of the students interviewed spoke of narrative, guest speakers, and experiential learning creating those moments. However, it should be considered that many of the subjects also had undergraduate classes or experiences which included more traditional use of humanities, potentially developing their abilities to find value in the humanities-based learning opportunities in physical therapy school. It is uncertain for students with minimal humanities exposure if it is better to ease them in using familiar experiences, such as exposure to guest speakers, or to plan activities potentially outside their comfort zone, such as viewing a creative arts performance. Students might be more receptive to activities which provide comfort through familiarity and therefore get more benefit from them. It is important to consider that transformative moments potentially do not need to come from grand ideas, but instead can come from simple moments, or “everyday epiphanies” (Danto, 1996).

Research Question Two

Research Question Two explored the attitudes and perceptions of faculty and students regarding the use of humanities. All interview participants voiced support of humanities integration and the belief that humanities play an important role in physical therapy school curriculum. Some students and graduates admitted that they initially had concerns about humanities when projects and assignments were introduced, but grew to value humanities significantly. All participants recognized that some students never show appreciation for humanities, but faculty acknowledged that most students demonstrate growth with increased exposure. All agreed that humanities tend to be most highly appreciated in hindsight, after students have graduated and are practicing in clinical settings. Peck and Jennings (1993) reported similar findings in a study of current and alumni nursing students, concluding that alumni had a much greater appreciation for the use of humanities in their curriculum.

It was not a surprising finding that participants supported humanities integration, as both the program and the interviewees were chosen purposively because of their involvement with the humanities. But what seemed to reveal itself with each interview was that a culture has been created within the program that now sustains as a result of the attitudes of the faculty and students within it.

From a very early point during the interview process, it became evident that the student body might have been chosen for the program in part as a result of their diverse and eclectic backgrounds. When discussing why they chose to enroll at the institution, several students described the university as their “reach” school and expressed surprise at having been admitted. Some of the same students discussed how few prerequisite courses were required for application to the university as compared to other programs, allowing them more freedom in their

undergraduate course of study. Investigation of the Physical Therapy Centralized Application Service showed that out of over 200 schools, the studied institution had the lowest number of prerequisites, with most schools having twice as many or more (Physical Therapy Centralized Application Service, n.d.). Because of the low number of required undergraduate courses, students are able to major and minor in coursework not directly related to natural sciences. As a result, students with degrees in fields such as anthropology and art history are admitted into the cohorts. Furthermore, several of the students reported that they did not originally plan to apply to physical therapy school and needed to pick up the prerequisite courses late in their studies or even after obtaining their bachelor's degree. The low number of prerequisites makes it possible for students who did not follow a traditional educational path to apply. As a result, an eclectic group of students who embody the philosophy of the program are offered seats in a cohort. Faculty reported preferring a minimum GPA of 3.2 and relying heavily on the interview and essay, but also indicated that they look for students with diverse interests.

For other programs interested in integrating the humanities into their curriculum, the requirements for application to their institution may need to be reexamined. Many schools place emphasis on prerequisite coursework in the natural sciences, believing that science grades are predictive of success in physical therapy coursework. However, some would argue that high achievers will succeed no matter what course of undergraduate study they pursue. Through a survey of the literature, Wershof Schwartz et al. (2009) make the case that "The single best predictor of academic achievement in medical school and residency is previous academic performance, regardless of the discipline of study" (p. 374). Fins et al. (2013) identify the importance of encouraging the "right kind of student," also suggesting "that students who are truly strong in the humanities are also going to be strong in the sciences" (p.362).

In addition to the low number of prerequisites drawing an eclectic mix of students, the studied institution might attract the very type of student that it values by their appreciation of the culture it embodies. Many students discussed feeling that the program was the “right fit” because of aspects of the program that make it unique. Although the school has an excellent academic reputation and attracts students on merit alone, the liberal arts identity and diversity of campus may pull students who embody the culture of the humanities into the cohort. Murray (2003) identifies that using humanities in medical school curriculum helps students to feel proud of the diversity in their academic backgrounds and activities, leading to more creative ideas and satisfaction with the program. Prospective students might get a sense of the student satisfaction when they investigate the school.

Students are not the only ones who affect the identity of the program. New faculty are also chosen in part based on their potential in part to promote a positive culture towards humanities. The program director and a senior faculty member mentioned that during the hiring process they look for new faculty who show interest in or appreciation for the humanities. As a result, the faculty have a shared vision of emphasis on the human side of healthcare in the classroom. This unified vision may contribute significantly to success in weaving humanities throughout the curriculum.

Repeated exposure to the humanities was identified as a way to increase student buy-in and appreciation. If humanities are contained to one or two classes, students who are initially skeptical about their value may not show the growth reported at the studied program. Cohesive faculty support of humanities and commitment to increasing their presence throughout the curriculum can give humanities a proper chance to thrive.

The importance of showing relevance of the humanities was also discussed as important in shaping attitudes and perceptions towards the humanities. When students understand the connection between a planned humanities activity and clinical practice, they are likely to have increased interest and engagement. Sellheim (2003) found that physical therapy students desire context and relevance to what they are learning and have a preference for deep learning experiences over surface level content. Humanities are a tool for building context and meaning into learning, which is an important component of clinical competence (Epstein & Hundert, 2002).

Research Question Three

Research Question Three investigated the expected outcomes of integration of humanities and how they are assessed. All participants were able to identify a number of benefits they believe are cultivated through the humanities. Most commonly mentioned were development of the skill of reflection, formation of professional identity, development of soft skills, understanding and providing patient-centered care, and formation of well-rounded students. The majority of the interviewees in this study focused on how the humanities can help physical therapists to be better practitioners through their communication and connection abilities. Participants also agreed that humanities provide benefits for students in their personal development and well-being, helping students to return to the fundamental reason that they chose to become a physical therapist. One faculty member suggested that the humanities help students to become more comfortable with “gray,” the ambiguities and uncertainty in health care. The identified benefits are similar to those found in the literature. For instance, Wershof Schwartz et al. (2009) recognize empathy, professionalism, and self-care/well-being as being cultivated through humanities, and Shapiro et al. (2009) identify development of professionalism, narrative

reflection skills, and communication abilities as important outcomes. Shapiro et al. also describe the benefit of humanities as providing “additional intellectual tools to help recontextualize their profession in a way that more fully honors its complexity, nuance, ambiguity, and possibility” (p. 192). Many of the benefits gained through humanities are considered to be intangible, the types of competencies that cannot be taught from a textbook.

Humanities were most commonly associated by interviewees with cultivation of patient-centered care and a humanistic approach. Critical thinking and clinical reasoning, empathy, and professionalism, buzz words in physical therapy education often linked to humanities, were mentioned but downplayed in the interviews and tended to be part of follow-up discussion rather than the first benefits named when questioned on humanities outcomes. The way in which interview subjects discussed humanities suggests that the program is explicit in talking about cultivation of patient-centered practitioners and less outwardly concerned with other proposed benefits of humanities.

Graduates frequently mentioned reflection as one of the most important skills developed through humanities integration which they have continued to use in clinical practice. Based on the framework of Schön (1987), the types of reflection addressed encompass both reflection-on-action, looking back at an event and thinking about the factors that led to it and what might have changed the outcome, and reflection-in-action, thinking about a situation as it is in progress and making quick changes as needed to change the course of action. One graduate expressed how reflection-in-action helped her to connect with a difficult patient, and another spoke of how reflection-on-action helped her to work through her emotions after a particularly bad day. Although reflection-in-action is specifically linked to transformative learning, interview

participants expressed significant value to reflection-on-action for their well-being. Graduates recognized reflective skills as being very important to their career success and satisfaction.

Assessment of outcomes based on the use of humanities is a challenge of humanities integration (Savickiene, 2010). Humanities-linked outcomes at the studied institution were primarily assessed through the use of narrative, with faculty reporting that the Gibbs Reflective Cycle (Gibbs, 1988) is effective in helping students to understand the depth of reflection that is sought. Faculty said that using the Gibbs model as a rubric helps them to assess student growth through reflective writing over time. Beyond the Gibbs model, the faculty did not identify other formal ways in which the effectiveness of humanities use was assessed, acknowledging that it is a difficult task. Fins et al. (2013) question the necessity of formally assessing humanities, arguing that “it is also important to note that if we cannot measure something, it does not mean that it does not have value” (p. 357). Faculty discussed anecdotally how humanities can make students into better clinicians, stating that it would be interesting to see a long term study linking clinical outcomes to a clinician’s previous humanities exposure in school. But faculty also unanimously agreed that there would be no easy way to carry out such research.

Demonstrating the outcomes of humanities integration by shifting the focus from grading of individual projects to overall assessment of clinical performance after graduation may be a key way to validate the value of humanities in physical therapy education. Because the effect of humanities is thought to be best demonstrated in the long term, it may be impactful to follow up with graduates of the program, surveying them on how they perceive their humanities experiences affect their clinical practice. Studying patient perceptions of therapist qualities, comparing therapists from schools with or without humanities in the curriculum, may also be a way to demonstrate the value of humanities in physical therapy curriculum. The challenge to

such studies is that there are a number of confounding factors which may affect results and make it difficult to isolate the influence of humanities.

Lack of evidence of the impact of humanities used in education is not limited to physical therapy. Although humanities are frequently used within medical school, it is also acknowledged that there is a lack of evidence regarding outcomes (Petersen et al., 2008), with most examples being anecdotal. Epstein and Hundert (2002) describe the need for students to develop competence in what they term “habits of mind,” described as “attentiveness, critical curiosity, self-awareness, and presence,” all of which are difficult to assess in measurable terms. Shapiro et al. (2009) warn against treating humanities outcomes as competency based skills which can be checked off a list and recommends instead the use of “critical incident reports,” examples of which are narrative reflections and creative projects. One challenge to accurate assessment of humanities-based skills is that there are many confounding factors based on personal characteristics, such as undergraduate major or previous life experiences, which may heavily impact outcomes (Fins et. al., 2013; Wershof Schwartz et al., 2009). Difficulty measuring impact of humanities in education may hamper the adoption of humanities into the curriculum in some programs.

Research Question Four

Research Question Four examined the departmental and institutional factors present which support the humanities at the studied institution. The success of humanities integration in the studied physical therapy program appears to be due to a blend of factors. The physical therapy department benefits from being part of an established liberal arts university that has a large endowment and bountiful resources. Many spoke of the university’s pride in its liberal arts heritage and the subsequent effort made to elevate humanities across the campus. Faculty

credited administration with being invested in the promotion of the intersection of science and art. The emphasis on interdisciplinary collaboration was seen in the recent campus initiative called Coalition of the Liberal Arts, which identified its purpose as an “emphasis on integrating the liberal arts experience across the humanities and sciences.”

The studied institution has earned a reputation as a leader in medicine and research, which affords a freedom for faculty to explore other avenues of scholarship and pedagogy which might not seem possible at schools still working to establish themselves. In education there is often a consumerist attitude and a question of value for the money, creating the need for some universities to focus on solidifying existing programs. Because of its successes, the studied institution may not have to work as hard to prove itself to its students, opening the door to try new and different educational approaches with less pushback. Faculty feel supported on an institutional level to be innovative and creative.

Within the physical therapy department, clear support for use of humanities comes from senior faculty who are invested in the cause and willing to mentor newer faculty. Some senior faculty have engaged in research on use of narrative, establishing their expertise in the field. Furthermore, senior faculty create awareness of the benefits of humanities through both their input at department meetings and informal conversations with colleagues. Finally, they potentially help to attract new faculty who have a strong interest in the humanities and the initiatives currently being carried out within the department. Shapiro et al. (2009) concur with the importance of the faculty serving as mentors, suggesting that leadership and faculty members are of great importance in allowing humanities to flourish.

The personality of the physical therapy student cohort is also an important departmental factor in the studied program which helps the humanities to thrive. As previously mentioned, the

reputation of the institution and physical therapy program coupled with the low number of prerequisite requirements attracts a large applicant pool full of top students with diverse and eclectic backgrounds. Strong applicants are invited for campus interviews, allowing faculty to further assess fit and to build classes full of students who show potential to flourish in their culture.

Finally, the department benefits from having a program director who stands behind faculty initiatives, allowing faculty to flourish through their own creativity and ideas. Both students and faculty acknowledged the important role they perceive the director plays in the success of humanities integration through his support. The director's willingness to step back and allow faculty to implement their ideas is likely helped by having a rich, talented student applicant pool who generally succeed on boards and clinical performance. When measurable outcomes of education are good, more opportunity for flexibility within the classroom is created.

The factors contributing to the success of humanities integration within the studied physical therapy program are similar to attributes recognized in a successful medical humanities program at the University of California at Irvine (UCI) College of Medicine. Shapiro and Rucker (2003) identified support of institutional leadership and faculty colleagues, student involvement in development of humanities programming, good funding, and program recognition on a national level as reasons for the health and growth of the program at UCI. Although program recognition was not mentioned by the interview participants at the subject school, it was evident by the pride with which the faculty represented the program at a national conference that recognition helps to reinforce their dedication to their work and to attract students and new faculty who are drawn to the culture of humanities integration.

Research Question Five

Research Question Five investigated challenges to successful humanities integration in physical therapy curriculum. Although the interview participants were very positive about the success of humanities integration, they acknowledged challenges within their own program and within the larger system of physical therapy education. One concern cited was lack of student buy-in. Many potential reasons exist for lack of student engagement with the humanities. For some, it may have to do with feeling that humanities were not part of the expected physical therapy curriculum. Students who had limited exposure to humanities during undergraduate studies or who did not enjoy previous experience with humanities may be less open to their use in PT school. Physical therapy programs emphasize natural science in prerequisite coursework, but very few require humanities coursework for admission. Although increasing the number of prerequisites to include humanities may not be the best course of action, the potential lack of exposure as an undergraduate may have implications for engagement with humanities in graduate school.

Financial concerns of students and a consumerist attitude in education create another challenge, as some students have pushed back against the cost and length of time needed to become a physical therapist. Coursework which does not have explicit relevance to a student's perceived skills needed as a PT might seem like a frivolous use of class time. Some students view education as a product for which they have paid and judge course content based on what they see as value for their money. It may be the responsibility of educators to guide students in understanding the complexities of their education and why it should not be shortened or scaled back. It is also highly important that faculty talk to students about the differences between being

a professional and being a skilled technician and the ways in which humanities can separate the two.

Lack of faculty support was also suggested as a potential challenge to humanities integration. Most faculty interviewed believed there are faculty who might value and respect the humanities but see it as someone else's job to integrate them into coursework. If humanities are compartmentalized under specific content areas or teachers, the risk of students not gaining full appreciation for their relevance is created. The impact of the implicit curriculum, as described by Eisner (1994), should be considered. If faculty choose not to integrate humanities into their coursework, students might get the message that humanities are not important. A faculty member who is well-liked and well-respected but omits humanities in their pedagogical approach may unintentionally contribute to lack of student buy-in. On the other end of the spectrum, Shapiro et al. (2009) suggest that faculty who are using humanities serve as powerful role models for students and may have a positive impact on the way that humanities are perceived and used in their development into physical therapists.

Even when faculty are willing to include humanities in their coursework, lack of comfort and knowledge about how to do it effectively is a potential issue. All faculty at the studied institution discussed the positive impact of mentorship, but as one faculty member with teaching experience at a different institution pointed out, not all faculty have this luxury. It would be short-sighted to believe that faculty will be able to adapt to humanities use without assistance. Sellheim (2003) suggests that faculty need guidance to examine their implicit beliefs about pedagogy and mentorship in order to make changes. If mentorship cannot be found at their institution, faculty need a strong support network within the professional organization to help them effectively use humanities. The Consortium of Humanities, Professionalism, and Ethics

(CHEP), a subgroup of the American Council of Academic Physical Therapy (ACAPT), is working to be a resources to all educators, but it is still in early stages of development and not well known by many faculty.

Interdisciplinary collaboration is an option for introducing humanities into curricula. At some medical schools, faculty from humanities fields are brought in to teach coursework as needed. Inclusion of guest lecturers may be a potential solution to help physical therapy faculty increase their comfort with teaching humanities. However, the literature suggests that it may be important that most humanities coursework is facilitated by physical therapy faculty and not instructors in other fields, as students are mistrustful that non-medical faculty understand the needs of the profession (McCartan-Welch, 1997; Shapiro et al., 2009; Wetzel, Hinchey, & Verghese, 2005).

Time is a clear challenge, both for faculty trying to make room for all required content and for students trying to juggle the demands of physical therapy school. The question becomes how to balance integration of humanities so as not to push out other needed content or add to student stress. One faculty member recognized the importance of experience when trying to integrate humanities, stating that she has taught long enough that she is able to move beyond focusing on what content is needed for students to pass their boards. Sellheim (2003) suggests that when too much content is in the course, it keeps learning at a surface level. Humanities may help bring content to deeper levels of understanding. One interviewed student reinforced that humanities make learning more salient, a claim which is an important point to consider. If humanities make content stick, the time required for integration may be well worth the effort.

The profession of physical therapy itself has perhaps created one of the biggest challenges to humanities integration by becoming excessively focused on using evidence-based,

quantitatively valued approaches to patient care. Physical therapy once used the marketing slogan “The Science of Healing, the Art of Caring.” As interviewees suggested, a push to establish the credibility of the profession to both the public and to insurance companies may have caused the “art” to be forgotten. One senior faculty member suggested that PT Journal, the primary research publication of the profession, does not accept very many qualitative submissions, focusing instead on quantitative results. It is important that leaders in the profession of physical therapy, not just the educators, recognize and promote the value of the humanities for the advancement of physical therapy.

Strengths and Limitations

The researcher first became interested in this study due to their perception that humanities were underutilized and underappreciated in physical therapy education. These perceptions were strengthened after attending conferences and engaging in conversations with other physical therapy educators about the need for humanities to be used in programs. The researcher also became involved in CHEP, the Consortium of Humanities, Ethics, and Professionalism. Through conferences and interaction with educators involved in CHEP, the studied program was identified based on its use of and commitment to the humanities. As a result of these factors, the researcher completed the case study with the potential bias of being supportive of humanities’ use in physical therapy education and of believing that the case study school was using humanities successfully in its program.

There was a risk that the researcher’s positive outlook on humanities could influence subject responses. Subsequently, the researcher was careful to practice reflexivity during the interview period and again when coding the data and looking for themes. According to May and Perry (2014), reflexivity “involves turning back on oneself in order that processes of knowledge

production become the subject of investigation” (p. 109). The researcher reflected on interviews completed each evening, writing down thoughts and impressions in a journal and considering areas of potential bias. The researcher also listened to the interviews multiple times in the months following the initial data collection and was able to reflect on the responses in a fresh way after time had passed. The other ways in which the researcher sought to gain credibility was through triangulation of data and member checking. Triangulation of data was performed by comparing information provided between participants as well as by examining artifacts such as the university website, syllabi, the online journal, and fliers for optional humanities events. Member checking was completed by sending the full interview transcripts to all participants and asking for any corrections or clarifications needed to confirm that their words were accurately represented.

Subject selection was purposive, aimed at identifying participants who were involved with promotion of humanities within the program in various ways. The goal of the selection was to include subjects who could provide the most extensive information on use of the humanities at the institution. The study may have been enhanced by interviewing faculty, graduates, and students who did not exhibit the same level of passion for humanities to investigate and compare their feelings regarding the research questions. However, within the sample chosen there were a variety of perspectives and attitudes which gave the researcher insight into multiple ways the humanities are viewed at the school. There was also the risk that students interviewed were not forthright with their responses due to knowing the researcher’s agenda and not wanting to be critical of their program. It is acknowledged that when students spoke of negative attitudes of their classmates, the criticisms actually may have been reflective of their own views.

Recommendations for Action

This research studied the manner in which humanities are integrated into physical therapy education at one institution and the benefits and challenges perceived by faculty, students and graduates. One of the primary aims of this study was to provide a blueprint for other schools looking to increase the presence of humanities in their physical therapy programs. While some aspects may be unique to the institution studied, there are many factors in humanities integration that are generalizable to other programs. Physical therapy educators wanting to bring humanities into their curriculum should consider a number of findings from this research when trying to make impactful changes which will contribute to the success of the endeavor.

Humanities integration cannot take place in a physical therapy program without a faculty member expressing interest and willingness to take the lead in coordinating the integration. One interview participant referred to this person as a “champion” of the humanities, recognizing that they would need to have passion and commitment to carry out a plan. This faculty member would be integral in educating others about the importance of humanities, mentoring or helping faculty to find mentors, securing support of administration, helping with curricular planning, and suggesting changes in student and new faculty selection that could help build a culture which supports humanities.

It is important to be explicit about the relevance of the humanities in physical therapy education and to create awareness among faculty and students regarding the need for humanities in the curriculum. Physical therapy educators actively involved in humanities integration efforts or CHEP represent a small proportion of all physical therapy faculty. Faculty and students who did not complete undergraduate work at a school with a strong liberal arts curriculum may have very limited understanding of the humanities, especially regarding their intersection with

science. In light of the consumerist attitude of some students, it seems important to explain the value of humanities as it relates to the profession. The expectations, professional obligations, and challenges of being a physical therapist may need to be presented in a clear manner, recognizing that students often do not understand the context of what they are being taught until they have spent time working with patients in a clinic. Likewise, it is important that benefits of humanities be discussed with other faculty at meetings or inservices, as many physical therapy educators may have little exposure to the humanities depending on their own undergraduate and life experiences. A shared understanding among faculty and students of the purpose of humanities seemed to be an important factor in allowing humanities to thrive at the studied program.

Mentorship should be made available to faculty who are willing to bring the humanities into their classrooms but lack the comfort or knowledge to do so effectively. During interviews, the importance of mentorship was a theme repeated frequently as being critical to the success of humanities integration. To optimize the accessibility and relevance of humanities in physical therapy curricula, the guidance of experienced physical therapy faculty members who have used humanities in their teaching is valuable. If there is not a faculty member at the same institution who is able to serve as a mentor, it is crucial to find a network of faculty from other institutions who will help. The Consortium for Humanities, Ethics, and Professionalism (CHEP) has become an important resource for physical therapy educators who are working to increase the presence of humanities in their programs. Through CHEP, faculty can find both mentors and curricular ideas to help with humanities integration. There is also value to interdisciplinary collaboration, and faculty at the subject school credited an open working environment with other disciplines in helping to strengthen their curricula. Whatever the route of mentorship may be, it is important

that physical therapy faculty feel supported to gradually introduce humanities at their own pace. Sullivan and Rosin (2008a) warn that it takes time and patience to allow faculty to develop to a point where they are comfortable using the humanities.

Administrative support should be secured from a very early point in order to successfully bring the humanities into a program. From a financial perspective, administration can provide funding for educational experiences and resources needed to prepare faculty as well as to sponsor humanities related learning opportunities for students. But perhaps even more importantly, the support of institutional leadership is needed to unify faculty under a common vision and establish the importance of humanities in the curriculum. Without top-down support, humanities may end up compartmentalized in the courses of a few faculty members who believe in their worth but don't have the resources to bring their full vision to fruition.

Determining the best way to integrate humanities-related activities into the curriculum may initially seem like a daunting task. It would be wise to follow the advice of interview participants to start slowly and simply, giving both students and faculty a chance to adjust to what may be a very new way of learning for them. Another good recommendation is to look for an activity which will create enough impact to inspire buy-in, building excitement among students for subsequent humanities-based content.

Faculty should consider that narrative, guest speakers and panels, and experiential learning experiences seem to be impactful ways to incorporate the humanities while making them both relevant and time sensitive. Interview participants made a compelling argument for these activities creating powerful learning experiences and meeting the same objectives as other forms of humanities. Even though film, literature, and art are traditional ways to incorporate humanities, potentially creating more of what Mezirow (1997) refers to as “disorienting

dilemmas,” they seem to be less accessible to all students and may be more challenging to fit into coursework. The trade-off of using humanities-based activities which do not use traditional mediums but have more tangible benefits for a larger number of people, creating more faculty and student buy-in, may be worth any differences in potential impact. The power of film, art, and literature, however, should not be overlooked and should be offered at a minimum as optional experiences or recommended activities for the students who see the value. There may not be a one size fits all approach, so activities may need to be tailored to the context of the institution or the personality of the cohort (Sullivan & Rosin, 2008a).

When adding humanities into curricula, repeated exposure seems to be an important part of the planning. Many interview subjects expressed that their positive attitudes towards humanities in physical therapy education developed over time, suggesting the importance of weaving humanities throughout coursework to build student engagement and subsequent benefits. In order to make humanities a core part of the curriculum, widespread faculty support in all major content areas is needed. Humanities should be a central, not peripheral, part of curricular planning. While the use of narrative reflection during clinical experiences is an effective way to integrate humanities throughout a number of content areas, relying on clinical experiences alone may prevent students from getting the benefits of humanities that are unique to didactic experiences. In addition, students may perceive that not all faculty value humanities if their use is limited to only one component of their education, getting the implicit message that humanities are not important in their development as physical therapists.

Educators must consider how much emphasis needs to be placed on identifying and demonstrating outcomes created through use of the humanities, as assessment can be a challenge. Narrative seems to be a viable way of documenting student growth over time, but few other

humanities-related assessment methods were identified in this study despite the established use of humanities at the institution. Most reports of the impact of the humanities throughout the literature are anecdotal. Some literature suggests that less emphasis on showing outcomes should be considered, especially since it is commonly acknowledged that benefits of humanities are best seen in the long term, not the short term (Fins et al., 2013).

Perhaps the most important recommendation for long-term humanities success is the importance of purposively building a culture which supports humanities. The program studied values a student body with diverse interests and backgrounds and attracts an eclectic group of applicants from a wide variety of undergraduate majors through its very low number of prerequisites for admission. The school also invites candidates to campus for an interview, allowing the admissions committee to get a stronger sense of the fit of the students for the program. These factors combined allow the school to form cohorts who embody the humanities-laden values of the program. Although the studied program benefits from drawing a large number of qualified applicants due to its reputation and resources, allowing high selectivity when offering admission, other programs should consider rethinking their admissions process and what factors should be considered when offering seats to students.

Physical therapy schools should consider how many prerequisites, especially in the natural sciences, are necessary to ensure adequate background knowledge for physical therapy coursework. As demonstrated in medical school models, students who are high achievers remain high achievers, even when their undergraduate major is unrelated to natural sciences (Wershof Schwartz et al., 2009). Cohorts comprised of students from a wide variety of undergraduate majors, including some humanities fields, will potentially support a culture of humanities through different backgrounds and perspectives. Schools should also consider the importance of

the interview as part of the admissions process to building a cohort full of students who embody the mission of the program. Even if time is limited and faculty are overextended, much deeper information is obtained when students are chosen based on face-to-face meetings instead of by profiles on paper.

The importance of involving students in helping to suggest and plan humanities related activities should not be overlooked. Students bring enthusiasm and fresh perspectives in their approach to planning. One student interviewed spoke extensively on the importance of faculty embracing technology to appeal to modern student needs, while another spoke on the importance of allowing students to teach material to one another. By including students in humanities integration planning, faculty benefits from learning what activities appeal to students and create the opportunity for new ideas to be presented. The process may also cultivate student buy-in, as students who are unsure of humanities may be influenced by the enthusiasm of their peers.

To further build a culture in support of humanities integration, programs must look for openness to and support for use of humanities when new faculty are hired. Faculty are often selected based on area of expertise and research agenda. While qualifications are undeniably important, search committees must look for candidates who will fit into and help grow the targeted culture of the department. When faculty are united in their mission for the program, it sends a strong message to students about what is valued. A university or program whose ethos embodies the importance of the humanities will be more likely to have success with meeting the intended outcomes (Seifert, et al., 2008). To strengthen this ethos, it is also important that faculty have support and resources which allows them to successfully carry forth their vision.

Successful integration of humanities into physical therapy education will require hard work, support, creativity, patience, vision, and time. As the profession matures and adapts to the

needs of modern society, the dimensions of patient care cultivated by humanities will be crucial for physical therapy to thrive. The end result of humanities integration into physical therapy education should be well worth the effort. Further study of this relatively new area in physical therapy education is needed to better understand potential challenges, to identify paths to success, and to ultimately identify longer term outcomes.

Recommendations for Further Study

This research focused on gathering information from a school which was known to be integrating humanities from the point of view of faculty, students, and graduates who actively support and use the humanities. To potentially gain a different perspective, future research could focus on the attitudes and perceptions of students and faculty in the same program who have not embraced humanities or do not use them as a teaching tool. Equal participation from both male and female subjects could be sought for interviews to examine gender differences in the way that humanities are used and perceived. Studies could also be performed of physical therapy programs not actively engaging in the use of humanities to examine the attitudes and perceptions of the benefits of humanities in physical therapy education. A case study could be performed of a program which is just beginning to address humanities integration in the curriculum to examine successes and barriers throughout the process.

Another need in the body of literature is an examination of humanities in physical therapy education on a larger scale. A survey could be performed of physical therapy educators across the country to examine attitudes regarding the use of the humanities, as well as their current use of humanities in the classroom. A similar survey could also be completed with physical therapy students and their perceptions regarding the current or potential use of humanities in their curriculum, possibly incorporating undergraduate humanities exposure and previous life

experiences as potential influences on attitude. Practicing clinicians could also be surveyed regarding perceptions of the role that humanities coursework, even at an undergraduate level, played in forming them into the physical therapist and person who they are today.

As a loftier but more impactful study, researchers should attempt to examine the clinical outcomes of students who have received significant exposure to humanities versus ones who have not. It is difficult to define what constitutes success as a physical therapist, and potentially even more challenging to measure nuanced outcomes in patients such as increased self-efficacy and motivation, but it is believed that the value of humanities might be best seen in these variables.

Summary

This study attempted to provide better understanding of how and why humanities can be used in physical therapy education. Although patient-centered care and professionalism have always been part of the vocation of physical therapy, the increased positivistic emphasis of physical therapy education as well as the demands of society and health care have created a need for the humanistic element to have increased presence in educational programs. Integrating humanities into physical therapy education appears to be an important step in developing well-rounded physical therapists who embrace their professional identity and feel prepared to face the many challenges of 21st century healthcare.

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Appendix A

Interview Protocol: Faculty

- a. Introduce myself. Talk about what I am studying and why.
- b. Explain consent form and ask interviewee to sign.

Interview Questions:

1. Tell me a little bit about yourself:
 - a. If not stated, find out educational background, previous work experience, which classes they teach
2. Tell me what the term humanities means to you.
3. Tell me about how you use humanities activities in the classroom. Give me some specific examples. (If it is not an obvious use of humanities, push for explanation of why they consider it to be humanities).
4. What inspired you to include humanities in your coursework?
5. Did you feel comfortable using humanities in your classroom when you first started teaching at [your university]? If yes, what in your background or educational experiences might have contributed to your comfort? And if no, how did you develop the ability to use them effectively?
6. In what ways do you feel that the humanities contribute to your teaching (pedagogical vs. personal)? Can you give me a few examples of times where you could see clear impact on students?
7. What impact do you feel that using the humanities has on the affective component of learning, including students' attitudes, values, and beliefs? Give me some examples of what you have seen to allow you to draw these conclusions.
8. In what ways and how often do you assess the impact of the humanities on the students?

9. How receptive are students to the use of humanities in your classes?
10. What factors in your department or on campus as a whole do you feel support the use of humanities in curriculum? Are there any particular people who you feel have supported or mentored you in using humanities? Tell me an example of how this was done.
11. Is the physical therapy faculty as a whole committed to the integration of humanities in the curriculum? Are there certain content areas in which the humanities are used or are they threaded throughout? Give me your views on whether or not they should be used in all content areas and why.
12. What are the benefits and challenges of using humanities in the curriculum? Are there particular benefits (or challenges) to you personally that are different than the benefits to the students?
13. Is it difficult to find time to include humanities related activities in coursework? How are you able to work it into the students' schedules?
14. Why do you think (compared to medical or nursing school, for instance) that physical therapy educators have been slow to adopt use of humanities in their curriculum?
15. What advice do you have for other physical therapy programs who would like to increase the presence of humanities in their curriculum?
16. Do you have any other thoughts or comments related to the use of humanities in PT education?

Appendix B

Interview Protocol: Students

- a. Introduce myself. Talk about what I am studying and why.
- b. Request that when discussing any particular coursework and related instructor that they refrain from discussing the particular faculty member and keep their comments general to ensure that the faculty member is not being described in an evaluative manner.
- c. Explain consent form and ask interviewee to sign.

Interview Questions:

1. Tell me a little bit about yourself:
 - a. If not stated, find out undergraduate educational background, extracurricular activities and interests.
 - b. What made you want to be a physical therapist?
 - c. Why did you choose [your university] for PT school?
2. Tell me what the term ‘humanities’ means to you.
3. Tell me about the classes you have taken in the PT curriculum in which the humanities have been used. What are some memorable examples of activities which involved the humanities?
4. Tell me what you like about the use of humanities in your PT courses
5. In what ways do you feel the humanities are helping in your development as a physical therapist?
6. Can you give a specific example of when a humanities related activity in your coursework had a big impact on the way you thought or felt?

7. Do you believe that humanities can be used in all classes across the PT curriculum?
Explain why or why not.
8. What kinds of things can a faculty member do to make the humanities effective as a teaching tool?
9. Can you describe anything that you think could be improved upon or dislike about the use of humanities in PT classes?
10. In what ways do you think this university supports the presence of humanities here on campus?
11. What other thoughts or comments do you have regarding the use of humanities in professional education?

Appendix C

Interview Protocol: Graduates

1. Introduce myself. Talk about what I am studying and why.
2. Request that when discussing any particular coursework and related instructor that they refrain from discussing the particular faculty member and keep their comments general to ensure that the faculty member is not being described in an evaluative manner.
3. Explain consent form and ask interviewee to sign.

Interview Questions:

4. Tell me a little bit about yourself:
 - a. If not stated, find out undergraduate educational background, extracurricular activities and interests.
 - b. What made you want to be a physical therapist?
 - c. Why did you choose [this university]? (And if applicable, to continue at [this university]?)
5. Tell me what the term 'humanities' means to you.
6. Tell me about the classes you took in the PT curriculum in which the humanities were used. What are some memorable examples of activities which involved the humanities?
7. Tell me what you liked about faculty using humanities in your PT courses
8. In what ways do you feel the humanities helped in your development as a physical therapist or as a person? Now that you are working as a PT, has your perspective on this changes as compared to when you were a student?
9. Can you give a specific example of when a humanities related activity in your coursework had a big impact on the way you thought or felt?

10. Do you believe that humanities can or should be used in all classes across the PT curriculum? Explain why or why not.
11. What kinds of things can a faculty member do to make the humanities effective as a teaching tool?
12. Can you describe anything that you think could be improved upon or dislike about the use of humanities in PT classes?
13. In what ways do you think this university supports the presence of humanities here on campus?
14. What other thoughts or comments do you have regarding the use of humanities in professional education?

Appendix D

Interview Protocol: Chair

- a. Introduce myself. Talk about what I am studying and why.
- b. Explain consent form and ask interviewee to sign.

Interview Questions:

1. Tell me a little bit about yourself:
If not stated, find out educational background and previous work experience
2. Tell me what the term ‘humanities’ means to you.
3. Tell me what drew you to [this university] as a place of employment.
4. Tell me about this university’s commitment to the humanities and how it may be different from other universities.
5. Explain to me the history of the increased presence of the humanities in your PT curriculum. What inspired it, and what steps were taken to get involvement from the faculty? What role did you play?
6. Do you believe that humanities can supplement the coursework in all physical therapy content areas, or are there certain classes which are better suited for the humanities? Please explain your answer.
7. What support, tools, or services are available on campus to help physical therapy faculty who wish to use humanities in their teaching?
8. What benefits do you feel the use of the humanities in curriculum have for physical therapy students? Thinking of the three domains of learning in the Normative Model, cognitive, psychomotor, and affective, which do you feel the humanities impacts the most and why?

9. What are the challenges of successfully integrating the humanities into your curriculum?
10. What advice do you have for other physical therapy programs wishing to increase the presence of the humanities in their curriculum?
11. What other thoughts or comments do you have regarding the use of humanities in professional education?

Appendix E

Site Permission Letter

(Letterhead)

Dear _____,

I am writing to request permission to conduct a research study at your university. I am currently a doctoral student in the Department of Professional Studies in Education at Indiana University of Pennsylvania and am in the process of writing my dissertation. My study is titled “Humanities in Physical Therapy Education: A Case Study of One Program’s Successful Curricular Integration.” I would like to conduct a study of your physical therapy program as a result of hearing about some of the humanities activities at your school at this year’s Combined Sections Meeting conference in San Antonio. The purpose of my study is to examine the use of humanities in a physical therapy program which is committed to and has had success with integrating the humanities into its curriculum. This study will raise awareness and understanding of humanities integration in physical therapy education and serve as a model for other physical therapy programs looking to increase humanities presence in their curriculum.

My proposed study would involve coming to your campus in the 2017-2018 academic year. While there, I would like to interview faculty, students, and the department chair, examine course syllabi and program documents, and observe a humanities related activity with the students if possible. Interview subjects will be recruited through e-mail. Identities of all participants and the school itself will be kept confidential in my report.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you might have. You can contact me at mgwt@iup.edu or at (814) 254-8705.

If you are willing to participate in this study, please sign and return the attached form.

Sincerely,

Jessica Lieb Cammarata, PT, DPT, NCS

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (724-357-7730).

Appendix F

Site Consent

Institution Letterhead

Institutional Review Board

[University]

[Street address]

[City, State, Zip]

6/23/17

Dear [University] IRB:

On behalf of [University], I am writing to grant permission for Jessica Lieb Cammarata, a doctoral student at Indiana University of Pennsylvania, to conduct her research titled, “Humanities in Physical Therapy Education: A Qualitative Case Study of One Program’s Curricular Integration”. I understand that Ms. Cammarata will recruit physical therapy students, faculty, and administrators through recommendations from a physical therapy faculty member who has agreed to provide contacts. Once identified, subjects will be invited to participate through e-mail. Research will be conducted on site at [University] and include document reviews, interviews, and possible class observation. It is anticipated that the research will occur within the next year. We understand that results will be published and that confidentiality will be maintained. We are happy to participate in this study and contribute to this important research.

Sincerely,

Signature

Title

Appendix G

Request for Participation (Faculty)

Dear _____,

My name is Jessica Lieb Cammarata, and I am a doctoral candidate in the Department of Professional Studies in Education at Indiana University of Pennsylvania. I am conducting my dissertation research on the use of humanities in physical therapy education and have been given permission to perform a case study on the use of humanities in the physical therapy department at [University].

You have been recommended to me as a faculty member who might be interested in participating in an interview regarding the use of humanities in your teaching. I will be onsite the week of (enter date here) and would like to meet with you if you are willing to participate in my study. The interview will be held on a day and time which are convenient to you and will take approximately one hour. All identifying information will be kept confidential. Participation is strictly voluntary.

If you are willing to participate in my study or would like more information prior to committing, please contact me by responding to this e-mail or by calling me at 814-254-8705.

Sincerely,

Jessica Lieb Cammarata, PT, DPT, NCS
Doctoral Candidate
Email: mgwt@iup.edu
Phone: (814) 254-8705
Department of Professional Studies in Education
Indiana University of Pennsylvania
Indiana, PA 15701

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone 724-357-7730).

Appendix H

Request for Participation (Student/Graduate)

Dear _____,

My name is Jessica Lieb Cammarata, and I am a doctoral candidate in the Department of Professional Studies in Education at Indiana University of Pennsylvania. I am conducting my dissertation research on the use of humanities in physical therapy education and have been given permission to perform a case study on the use of humanities in the physical therapy department at [University].

You have been recommended to me as a physical therapy student or recent graduate who might be interested in participating in an interview regarding the use of humanities in your physical therapy program. I will be onsite the week of (enter date here) and would like to meet with you if you are willing to participate in my study. The interview will be held on a day and time which is convenient to you and will take approximately one hour. All identifying information will be kept confidential. Participation is strictly voluntary.

If you are willing to participate in my study or would like more information prior to committing, please contact me by responding to this e-mail or by calling me at 814-254-8705.

Sincerely,

Jessica Lieb Cammarata, PT, DPT, NCS
Doctoral Candidate
Email: mgwt@iup.edu
Phone: (814) 254-8705
Department of Professional Studies in Education
Indiana University of Pennsylvania
Indiana, PA 15701

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone 724-357-7730).

Appendix I

Request for Participation (Chair)

Dear _____,

My name is Jessica Lieb Cammarata, and I am a doctoral candidate in the Department of Professional Studies in Education at Indiana University of Pennsylvania. I am conducting my dissertation research on the use of humanities in physical therapy education and have been given permission to perform a case study on the use of humanities in the physical therapy department at [University].

As the chair of the department, your thoughts and insights regarding the use of the humanities in your program would be very valuable to my study. I will be onsite the week of (enter date here) and would like to meet with you for an interview if you are willing to participate in my study. The interview will be held on a day and time which is convenient to you and will take approximately one hour. All identifying information will be kept confidential. Participation is strictly voluntary.

If you are willing to participate in my study or would like more information prior to committing, please contact me by responding to this e-mail or by calling me at 814-254-8705.

Sincerely,

Jessica Lieb Cammarata, PT, DPT, NCS
Doctoral Candidate
Email: mgwt@iup.edu
Phone: (814) 254-8705
Department of Professional Studies in Education
Indiana University of Pennsylvania
Indiana, PA 15701

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone 724-357-7730).

Appendix J

Consent for Participation in Research

(IUP Letterhead)

You are invited to participate in a research project conducted by Jessica Lieb Cammarata, a doctoral candidate at Indiana University of Pennsylvania. The purpose of this study is to examine the use of humanities as a teaching tool in physical therapy education. Humanities may include but are not limited to the use of art, literature, music, video, and various mediums from disciplines outside of health sciences which enhance the study of the human experience. The research will involve gathering the viewpoints of physical therapy students, graduates, faculty, and administrators at your university in regards to humanities in the curriculum, in addition to examining documents from the physical therapy department including course syllabi, assignment descriptions and rubrics, and program objectives/mission statements.

Your involvement in this study includes participation in a face-to-face interview which will require approximately one hour of your time. This interview will be audiotaped, with written notes being taken as needed. The interview will then be transcribed, and a copy of the transcription will be made available to you to check for accuracy. A follow-up phone interview may be requested for additional questions at a later time.

Participation in this project is strictly voluntary. During the interview, you have the right to decline to answer any questions or to end at any time if you choose. It is also requested when describing any coursework and related instructors to refrain from discussing the particular faculty member and to keep comments general to ensure that the faculty member is not being described in an evaluative manner. You also have the right to withdraw from the study at any time by notifying Ms. Cammarata or her faculty sponsor, Ms. Kelli Paquette. If you choose to withdraw, your information will not be included in the report.

There are no known risks to participation in this study. All electronic materials gathered by the researcher will be maintained on a password secured computer, and any physical data will be stored in a locked cabinet. All data will be kept for three years in compliance with federal regulations. Your name will not be used in any reports, and confidentiality will be maintained in descriptive information in the research report. The study results may be presented at conferences or published in academic journals. The study results will also be shared with [your university]. At the conclusion of the study, you will have the option of receiving the written research report.

Please sign below to consent to participate in this research project. You will be given a copy of this consent form.

My signature

Date

My printed name

Signature of the Investigator

For further questions or information, please contact:

Jessica Lieb Cammarata

Doctoral Student

Department of Professional Studies in Education

Indiana University of Pennsylvania

814-254-8705

MGWT@iup.edu

Dr. Kelli R. Paquette

Professor and Chairperson

Indiana University of Pennsylvania

Department of Professional Studies in Education

305 Davis Hall, 570 South 11th Street, Indiana, PA 15705

[\(724\) 357-2400](tel:7243572400) - phone

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone 72