The Value Of Internships Within Athletic Training Education: Educators’ Views

Heather Arlene Landry Shirley
University of Mississippi

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THE VALUE OF INTERNSHIPS WITHIN
ATHLETIC TRAINING EDUCATION: EDUCATORS’ VIEWS

A Dissertation
presented in partial fulfillment of requirements
for the degree of Doctor of Philosophy
in the Department of Higher Education
University of Mississippi

by

HEATHER ARLENE LANDRY SHIRLEY

August 2015
ABSTRACT

In a struggling global economy, internships offer students the opportunity to connect with a network of resources early on in their career journey and provide students with the hands-on work experience that is not often found within the confines of the classroom (Hindmoor, 2010). Higher Education is continuously posed with the challenge of defending the type of education that students are being given and the value that education has (Arum & Roska, 2011a; Arum & Roska, 2014b; Hacker & Dreifus, 2010). With that in mind, internships could be the missing link that leaves future graduates equipped with the much-needed preparation for their career by enhancing their ability to become more creative critical thinkers, better communicators, and more skilled practitioners (Weible, 2010). Athletic training is just one of many professional fields in which internships can provide students with opportunities to gain real-life experience and practice in their chosen profession.

This qualitative case study sought to gain a better understanding of the value of clinical internships Athletic Training Education Programs (ATEPs) through the exploration of the perspectives and experiences of ATEP directors, clinical coordinator, and faculty instructors. In-depth semi-structure interviews were conducted with 14 athletic training education professionals from 5 southern region institutions. After inductive analysis, two themes emerged, including: Knowledge & Experience…But a Lot of Experience and An Interesting Kind of Evolution.

Through the use of Kolb’s Experiential Learning Theory, helpful information was provided that enhanced the overall understanding of how to approach different learning styles in
higher education and in the field of athletic training. Although athletic training students are not typically characterized as having a predominant learning-style type (Stradley, et al., 2002), many are found to identify themselves with the hands-on learning that is strongly associated with the concrete experience and active experimentation of Kolb’s Theory (Kolb & Kolb, 2005). This study provided insight on how internships can be found to fill the role of that particular style of learning and potentially enhance the overall education of athletic training professionals.
DEDICATION

As I stand quietly over you watching as you sleep, I think of how peaceful you look as you sigh and turn. I watch in amazement and awe over you and wonder what it must be like to be so at ease with little worry and carefree. Oh how I have been truly blessed to have such a beautiful child to call my own and a husband whose unflinching love has given me the strength to reach this milestone. The countless hours that I spent diligently whittling away at this manuscript, oh how I longed for that time to spend with each of you. Without your love and support, I could not have made it this far. Without your words of encouragement William (husband), I could not have fought through the restless nights and hundreds of tears shed. You were right…this is something that no one will ever take away from me. I love you both more than words can say.
<table>
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<tr>
<th>Abbreviation</th>
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<tr>
<td>ACI</td>
<td>Approved Clinical Instructor</td>
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<tr>
<td>ALT</td>
<td>Active Learning Time</td>
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<td>AT</td>
<td>Athletic Trainer</td>
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<tr>
<td>AT-CETF</td>
<td>Athletic Training – Clinical Education Time Framework</td>
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<td>ATC</td>
<td>Certified Athletic Trainer</td>
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<td>ATEP</td>
<td>Athletic Training Education Program</td>
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<tr>
<td>ATS</td>
<td>Athletic Training Student</td>
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<tr>
<td>BOC</td>
<td>Board of Certification</td>
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<tr>
<td>CAAHEP</td>
<td>Commission on Accreditation of Allied Health Education Programs</td>
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<tr>
<td>CAATE</td>
<td>Commission on Accreditation of Athletic Training Education</td>
</tr>
<tr>
<td>CE</td>
<td>Continued Education</td>
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<tr>
<td>CI</td>
<td>Clinical Instructor</td>
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<td>CIP</td>
<td>Clinical Integrated Proficiencies</td>
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<td>CME</td>
<td>Continued Medical Education</td>
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<tr>
<td>CPD</td>
<td>Continued Professional Development</td>
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<td>EBP</td>
<td>Evidence-Based Practice</td>
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<td>ELT</td>
<td>Experiential Learning Theory</td>
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<td>LSI</td>
<td>Learning Style Inventory</td>
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<td>NATA</td>
<td>National Athletic Trainers’ Association</td>
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<td>NCAAA</td>
<td>National Collegiate Athletic Association</td>
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ACKNOWLEDGEMENTS

At the end of this journey, there are so many who deserve my thanks for their unwavering support and encouragement throughout this process.

First and foremost, I must give thanks to God for showing me the extent of my strength and for always opening a window when I thought that all the doors were closed. It was you that set me out on this journey and you that saw me through. I know that I worry when I should not and I am fearful when there is no need. Thank you for always steering me in the right direction and showing me that I can prevail through the weakness of my human heart and mind.

To Dr. Wells Dolan, though I know you were always much busier than you expressed to me, you always found the time to keep me calm and collected. With your box of tissue and kind words I could not have made it this far without you. Thank you for your constant encouragement and guidance, for the time and effort that you invested in me and in my education, and for the impact that you have made on my life.

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To the participants of this study, I would like to thank each of you for taking the time out of your busy schedules to entertain my research. What remarkable individuals you are. I cannot tell you how much I appreciate each of you having shared your stories with me.
To my extended family and my friends who were there for me throughout this process. Although I know that many of you had no idea of what I was going through at times, your kind words and well wishes will never be forgotten. I look forward to having the time to share with you again and to rekindle the social life that I had to sacrifice along the way.

Lastly, and certainly not least, I want to thank my loving family, especially my wonderful husband William. Thank you for all the sacrifices that you have made for our family. I cannot express the gratitude that I owe to you for allowing me to make this contribution to our family. To my son, Colton, for being the wonderful child that you are and for those heart melting smiles that I so look forward to each day. To the Shirley family (Lin & Sue), thank you for all that you have done to support William and I during this time and for showing me the unselfish love that a family can have for one another. To my grandparents (Charles and Mildred), thank you for helping to make me the person that I am today and for always providing me with the unconditional love that I so desperately needed. My childhood would not have been the same without you and my adulthood would not mean as much to me without your memory. I know that you both are smiling down on me and have cheered me on the whole way through. And, to my mother, I want to thank you for always encouraging me to have the strength to take charge of my own life, even through the hard times that you have had to endure in your own. Please know that I love each and every one of you.
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CHAPTER I
INTRODUCTION

“Now is the time to build a firmer, stronger foundation for growth that will not only withstand future economic storms, but one that helps us thrive and compete in a global economy”

– President Barack Obama

Overview of the Study

Internships in many fields, similar to apprenticeships in industry, afford students the opportunity to apply knowledge gained within the classroom to the rigors of the job (Hindmoor, 2010). Not only do internships provide hands-on work experience, but also a network of resources that connects students to people early in their career journey. Future graduates might find that an internship experience will help them become better prepared for their career, gain increased knowledge in job-related skills, achieve more advanced creative and critical thinking ability, enhance their communication skills, build stronger resumes, develop better interviewing skills, provide more opportunity by way of multiple job offers, and higher potential for more money to be earned (Weible, 2010).

Internships are offered in a vast array of fields including business, psychology, hospitality management, political science, law, and medicine. Regardless of the field of study, internships provide students with opportunities to apply classroom learning in a clinical practice. Athletic training is one such field in which internships provide students with opportunities to gain real-life experience and practice in their chosen profession.
In the past two decades, athletic training education has rapidly evolved and has found a reputable place in the world of healthcare professionals. From 1998 to 2005, less than ten years time, the number of accredited athletic training education programs (ATEPs) in the United States grew from 82 to 325 programs resulting in an increase of over 300% (Potteiger, Brown, & Kahanov, 2012). Efforts to standardize the education process for athletic trainers led to drastic changes that would aid the profession in modeling after other reputable allied healthcare professions.

The marked increase of ATEPs in 2005 stands in contrast to the field’s rocky start. Upon its initial introduction in 1959, the athletic training curriculum model encouraged students interested in athletic training to obtain secondary-level teaching degrees and/or to attend physical therapy school in conjunction with their athletic training studies. As the profession evolved, so did the curriculum. In the mid-1970s, the curriculum reflected students who were more driven towards a degree in athletic training alone. By 1983, the National Athletic Trainers’ Association (NATA) established guidelines that would lay the foundation for Athletic Training Education Program curriculum (Potteiger, Brown, & Kahanov, 2012). In 1989, the Board of Certification (BOC), Inc. was assimilated as a means to provide a certification program for entry-level Athletic Trainers (ATs).

The once sought out internship route was replaced by accredited academic programs. Attendance in one of these programs, now the sole means to obtaining certification by the BOC, is a requirement in order to become a certified and licensed athletic training professional. Taking on a competency-based approach, athletic training education morphed into a cohort curriculum designed with courses that heavily rely on one another in sequence and in some cases limiting the flexibility of the entire curriculum. The BOC, serving as the only accredited certification
program for ATs, regularly reviews and establishes the standards of practice and continuing education for athletic training. Although the recommended competencies have evolved over time, evaluations of ATEPs have found the overall curriculum to fall short of the needed change in areas such as providing a more flexible curricular option to accommodate differing student learning (Potteiger, Brown & Kahanov, 2012), providing more opportunities for interpersonal communications (Massie, Strang & Ward, 2009), and clinical proficiency evaluations (Walker, Weidner & Armstrong, 2008).

For years, programs have been encouraged to exceed the minimum standards in providing the best learning opportunity to students by utilizing creative tactics in both the classroom and in clinical settings. Shared perceptions of mixed results have caused many to believe that the cohort curriculum is still lacking in this area. For example, Potteiger, Brown, and Kahanov (2012) suggested that there is evidence that the current cohort curriculum is meeting the needs of employers from a technical aspect but continues to lack the interpersonal expectations that are being sought after in the field. As a result, the Commission on Accreditation of Athletic Training Education (CAATE) continues to seek out ways to improve the curriculum and provide the best learning opportunity possible for students in the field of athletic training (Armstrong, Weidner & Walker, 2009).

The athletic training profession has recently made a move towards placing more emphasis on evidence-based practice (EBP) in order to accommodate the recommendations set forth by the Institute of Medicine in 2003 (Welch, et al., 2014). This change of focus encompasses every facet of the profession including athletic training students, educators, and clinicians. Though there are barriers present such as time, knowledge of EBP concepts, and accessibility to resources, efforts are being made to assist future generations of athletic trainers in
overcoming some of these barriers (NATA, 2011). With the implementation of EBP concepts within curricula, the hope is to promote a new generation of clinicians who utilize these concepts within daily practice thereby producing more credible professionals. The need for change calls for a more holistic approach that includes not only practicing clinicians but also athletic training students. By setting forth a strong foundation within the ATEPs, one can hope that athletic training students will be exposed to more educational experiences that can be applied to their daily practice as a future professional.

**Statement of the Problem/Significance of the Study**

With the growing influence of athletics on today’s society, participation in sport has grown to an annual rate of nearly 30 million children and adolescents in the United States alone (Centers for Disease Control, 2013). This increase in participation in sport has drawn attention not only to the risk of injury but also to the profession of athletic training and its marketability to young professionals seeking out future careers.

During the 2011-2012 academic year, secondary school athletes suffered more than 1.3 million injuries (NATA, 2013). Concussions alone account for an estimated 1.6 to 3.8 million injury incidents per year as a result of participation in recreation- and sports-related activity, according to the NCAA (National Collegiate Athletics Association) (NCAA, 2011). Athletes are continuously submitting their bodies to the stresses of sport. Sometimes their bodies breakdown, and other times injuries occur at the hand of other athletes. Although there is an assumed level of risk inherently understood by the athlete when participating in sport, injuries can and may occur at anytime and proper care of these injuries is what allows the athlete to return to play safely. It is during this time that the athletic trainer is often recognized for their aid in this process. With such a continuous and rapid growth in athletic participation, the need for continued
education in the field of athletic training and the quality of care that these professionals are providing athletes is pertinent to the enhancement of the profession.

According to the National Athletic Trainers’ Association (2013), athletic training “encompasses the prevention, diagnosis, and intervention of emergency, acute and chronic medical conditions involving impairment, functional limitation, and disabilities” (p. 1). Athletic trainers (ATs) are allied healthcare professionals working under the direction of physicians. The key to understanding athletic trainers is realizing this role. Their collaboration with physicians helps to optimize activity and participation of patients and clients of all ages.

In efforts to improve the quality of education in athletic training, it is crucial to consider the key components of the education that prepares athletic trainers for clinical practice. For this reason, this research will take a deeper look into the role of internships in athletic training education from the perspective of program directors, clinical coordinators, and faculty instructors.

Athletic training education programs (ATEPs) are accredited programs approved by the CAATE. These ATEPs provide students with the opportunity to partake in an extensive curriculum involving not only classroom-based learning but also hands-on job preparation. The intent of these programs is to provide instruction in the following five domains of athletic training, as defined by the Board of Certification’s 2009 Athletic Trainer Role Delineation Study (2010, p. 18): (a) injury/illness prevention and wellness protection, (b) clinical evaluation and diagnosis, (c) immediate and emergency care, (d) treatment and rehabilitation, and (e) organizational and professional health and well-being. These domains are further broken down into competencies and proficiencies consisting of:

- risk management and injury prevention;
• pathology of injuries and illnesses;
• orthopedic clinical examination and diagnosis;
• medical conditions and disabilities;
• acute care of injuries and illnesses;
• therapeutic modalities;
• conditioning and rehabilitative exercise;
• pharmacology;
• psychosocial intervention and referral;
• nutritional aspects of injuries and illnesses;
• healthcare administration;
• professional development and responsibility.

Research performed by Walker, et al. (2008) showed that the primary goal of clinical education is to aid in the acquisition, development, and mastery of these types of clinical proficiencies. According to Weidner and Henning (2005), athletic training students perceive the majority of their professional development skills to derive from clinical education; thus, it is important for athletic training students to be involved in an extensive educational internship program to better prepare them as entry-level/certified athletic trainers (Weidner & Henning, 2005).

Many studies involving athletic training education have tended to focus on four common themes that often interact in many ways. These themes include the history and background of the athletic training profession (Weidner, Henning, 2002; Grace, 1999; Starkey, 1997; Neibert, 2009; Weidner & Henning, 2005; Mensch & Mitchell, 2008; Gardiner-Shires & Mensch, 2009), clinical education (Ristori, Eberman, Tripp, & Kaminski, 2011; Brower, Stemmans, Ingersoll,
& Langley, 2001; Armstrong, Weidner, & Walker, 2009; Weidner & Henning, 2002; Barnum, 2008; Miller & Berry, 2002; Berry, Miller, Berry, 2004; Vallevand, Paskevich, & Sutter, 2005; Weidner & Henning, 2005; Weidner, Noble, & Pipken, 2006; Rich, 2009), learning styles (Simmons & DiStasi, 2008; Carr & Volberding, 2010; Neibert, 2009; Berry, Miller, & Berry, 2004), and perceptions and assessment of quality (Raab, Wolfe, Gould, & Piland, 2011; Henry, VanLunen, Udermann, & Onate, 2009; Neibert, 2009; Seegmiller, 2006; Barnum, 2008; Miller & Berry, 2002; Weidner & Henning, 2004).

Studies regarding the history and background of athletic training have focused on the evolution of the profession (Weidner & Henning, 2002; Gardiner-Shires & Mensch, 2009; Starkey, 1997), the board certification process (Grace, 1999), and a look into the various ways to improve the quality of existing educational methods (Weidner & Henning, 2005; Neibert, 2009; Mensch & Mitchell, 2008). Each topic provides a better understanding of the origin of the profession, educational development, and potential areas for growth.

Studies regarding clinical education tend to take a more narrowed approach in determining the impact of the overall educational experience (Ristori, et al., 2011; Brower, et al., 2001; Armstrong, et al., 2009; Weidner & Henning, 2002; Barnum, 2008; Miller & Berry, 2002; Berry, et al., 2004; Vallevand, et al., 2005; Weidner & Henning, 2005; Weidner, et al., 2006; Rich, 2009). These researchers argued that factors such as “active learning time” (Berry, et al., 2004), “teachable moments” (Rich, 2009), and “sufficient supervision” (Weidner, et al., 2006), could greatly impact the students' educational experiences, learning, and skill development. In order to determine the level of impact that each of these factors makes, accurate assessment of students’ clinical skills must be made. In turn, it was further reasoned
that doing so would offer a more clear perception of real-life application of skills learned in athletic training curriculum (Armstrong, et al., 2009).

A third set of studies regarding learning styles focus more on key concepts of learning abilities such as engagement (Ristori, et al., 2011), flexibility in learning (Ristori, et al., 2011; Brower, et al., 2001), and real-time opportunities (Armstrong, et al., 2009). These studies suggest that gaining a better understanding of methods of teaching and evaluation by the Approved Clinical Instructors (ACIs) and how variances in learning styles can affect overall learning is a means to recognizing points for improvement. For example, Ristori, et al. (2011) debated that matching athletic training students preferred styles of learning with that of the approved clinical instructors teaching style could greatly impact the students’ overall ability to learn.

A fourth set of studies focused on program assessment and improvement within athletic training education. These studies not only examined perceptions of recent graduates (Henry, et al., 2009; Neibert, 2009; Seegmiller, 2006) but also what makes for a quality athletic trainer (Raab, et al., 2011), and the development of program standards, program curriculum, program criteria, and assessments that may affectively measure and improve quality within athletic training education (Barnum 2008; Miller & Berry, 2002; Weidner & Henning, 2004). Through evaluation of areas such as the level of involvement of clinical instructors (Barnum, 2008), these studies add to the body of knowledge that help to answer questions regarding the role of the clinical instructor in assisting athletic training students in professional skill development.

Although there is much research on athletic training education, there are only a few studies (Manspeaker & Van Lunen, 2011; Hankemeier & Van Lunen, 2011; Pitney & Parker, 2002; Mazerolle, Bowman, & Benes, 2014) that were qualitative in nature. These studies most
typically explored evidence-based practice concepts (Manspeaker & Van Lunen, 2011; Hankemeier & Van Lunen, 2011) and the general use of qualitative research in athletic training (Pitney & Parker, 2002). However, there was one study that looked specifically at engaging learning experiences in athletic training (Mazerolle, Bowman, & Benes, 2014). This study was the only one found that could arguably be related to research looking at the value and role of internships in preparation of students for future careers in athletic training, especially that which was qualitative in nature. This research was intended to fill the gap in scholarly understanding by examining the perceptions of program directors, clinical coordinators, and faculty instructors of athletic training education programs (ATEPs).

Research (Sandoval, 2012; Hindmoor, 2010) regarding internships in other fields found that students have a heightened sense of fulfillment when it comes to their knowledge base upon completion of internships. The knowledge gained in these types of experiences has been found to be beneficial to both the student and the employer (Weible, 2010). However, studies (Becker, Johnson, McNeil, & Warren, 2006; Alex-Assensoh & Ryan, 2008; Gavigan, 2010; Bulger, 2006; McDonough, Rodriguez, & Prior-Miller, 2009; Weible, 2010; O’Neill, 2010; Sandoval, 2012; Lipka, 2010; Lipka, 2010; McMurry, 2010; Perlin, 2011) in this area either focused on the broad concept of internships or were specific to areas such as medicine (Jaarsma, Muijtjens, Dolmans, Schuurmans, Van Beukelen, & Scherpbeier, 2009; Zeng, Woodhouse, & Brunt, 2010), business (Knouse & Fontenot, 2008; Tse, 2010), science (Hindmoor, 2010), or athletics/sports management (Surujlal & Singh, 2010; Chouinard, 1993). Building on the extensive research in these disparate areas, this study focused on the unique characteristics of athletic training. A specific focus on internships in athletic training provided a resource to program providers seeking to improve the quality of clinical experiences.
Purpose of the Study

The purpose of this qualitative case study was to better understand clinical internships in athletic training education programs (ATEPs). The phenomenon of clinical internships was explored through the perspectives and experiences of ATEP directors, clinical coordinators, and faculty instructors. More specifically, it sought insight on various aspects of internship style learning by investigating how the use of internship has evolved over time and how internship fits into the curriculum of athletic training education today. This research was intended to serve as a catalyst for university administrators and program directors in ATEPs to consider continued growth in the area of implementing internships, apprenticeships, and co-operative programs within both the current curricula as well as the consideration of creating alternative curriculums to allow for this style of learning. Through this qualitative research I sought to provide a voice to program directors, clinical coordinators, and faculty instructors within the higher education community. The findings of this study were intended to inform the larger higher education community of the broad phenomenon of internships’ value in successful preparation of students for professional careers.

Research Questions

The research questions primary to this study were based around the central phenomenon of athletic training education program (ATEP) directors’, clinical coordinators’, and faculty instructors’ perceptions of internships in their programs. The central question under consideration in this qualitative study was: How valuable is the internship/clinical education experience in an ATEP students’ preparation for a career as a certified athletic trainer (ATC)?

Some secondary questions included but were not limited to:
1. How have the changes made within the Athletic Training curriculum, in response to program accreditation, affected ATEPs and students?

2. What differences, if any, are there amongst programs and what the students are learning?

3. What specific components of the internship make it a valuable experience for the student?

4. What are problematic areas or limitations within the internships?

5. What practices have emerged to better educate students through internship experiences?

6. What formal and informal learning experiences within the curriculum help the ATEP student to better prepare for the job?

**Overview of the Methodology**

To conduct this study, I first sought institutions with athletic training education programs (ATEPs). When choosing a research site, I looked for an ATEP that had a history of some form of internship involvement supported within the curriculum. This was intended to provide this study with more depth and understanding of the concept of internships. I then employed interviews with ATEP directors, clinical coordinators, and faculty instructors. This approach provided different perspectives and added to the overall depth of the study. To obtain a clear concept of each of the three types of individuals within this study, the following defines each position and what their roles are within the curricula.

Program directors are employed full-time, have full faculty status, rights, responsibilities, privileges, and full college voting rights according to institutional policies relative to positions of similar stature (CAATE, 2012). Program directors should have both administrative and supervisory capabilities similar to those in positions of similar stature. In addition, they must
also have administrative release time comparable to individuals employed in similar healthcare programs within that institution. The Program Director’s responsibilities must include input to and assurance of (a) ongoing compliance with the Standards; (b) planning development, implementation, delivery, documentation, and assessment of all components of the curriculum; (c) clinical education; and (d) programmatic budget. The Program Director must be credentialed and be in good standing with the BOC, must possess a current state athletic training credential and be in good standing with the state regulatory agency (where applicable), and must be qualified commensurate with other administrative positions within similar healthcare programs in the institution (CAATE, 2012).

Clinical coordinators, or clinical education coordinators, are full-time employees and members of the faculty (the Program Director or other duly appointed faculty) that must be identified as the Clinical Education Coordinator, must be allowed release/reassigned workload to meet the institutional responsibilities for Clinical Education, and must assure (a) student clinical progression, (b) clinical site evaluation, (c) student evaluation, (d) preceptor training, and (e) preceptor evaluation (CAATE, 2012).

Athletic Training Faculty Instructors include any athletic trainers who are identified as primary instructors of athletic training courses in which they incorporate the most current skills and knowledge in the field of athletic training. Athletic trainers are deemed eligible to become instructors based on their level of professional preparation and experience. Once recognized by their respective institutions, these instructors are responsible for maintaining a current certification and state licensure, be in good standing with the state regulatory agency and the BOC (CAATE, 2012).
Interviewing program directors, clinical coordinators, and faculty instructors of CAATE accredited ATEP programs provided diverse insight on the goals of internship/clinical education experiences. Each of these individual’s perception, of the role or value of internships in the preparation of students for professional practice as an athletic trainer, were examined. In preparation of these interviews, the researcher performed a thorough document analysis of the information surrounding each ATEP to obtain a better understanding of each institution’s curriculum as a whole. With the addition of the information provided through document analysis, I developed a sense of triangulation surrounding this phenomenon.

**Definition of Terms**

*Athletic Trainer (AT) or Certified Athletic Trainer (ATC)* is an allied healthcare professional that collaborates with physicians to optimize activity and participation of patients and clients across age of care continua. ATs work under the direction of a physician, as prescribed by state licensure statutes (NATA, 2013).

*Athletic Training* is “the prevention, diagnosis, and intervention of emergency, acute and chronic medical conditions involving impairment, functional limitation, and disabilities” (NATA, 2013, p. 1).

*Athletic Training Education Programs (ATEPs)* are accredited programs approved by CAATE that provide instruction in the five domains of athletic training, including: (a) injury/illness prevention and wellness protection, (b) clinical evaluation and diagnosis, (c) immediate and emergency care, (d) treatment and rehabilitation, and (e) organizational and professional health and well being (Board of Certification, 2010).
Board of Certification (BOC) is the only accredited certification program for ATs. It regularly reviews and establishes the standards of practice and continuing education for athletic training.

Clinical Coordinator is responsible for the assurance of student clinical progression, clinical site evaluation, student evaluation, preceptor training, and preceptor evaluation. This person must be allowed release/reassigned workload to meet the institutional responsibilities for clinical education (CAATE, 2012).

Clinical Education (CE) is required criteria within the ATEP curriculum set forth by the NATA that allow the student to gain the knowledge base needed to become a certified athletic trainer (NATA, 2011).

Commission on Accreditation of Athletic Training Education (CAATE) is the sole accreditation board for ATEPs. Its mission is to continually seek out ways to improve the curriculum and provide the best learning opportunity possible for the students in the field of athletic training (Armstrong, Weidner & Walker, 2009).

Faculty Instructor is responsible for the instruction of athletic training knowledge, skills, and abilities in required coursework, must be qualified through professional preparation, and experienced in their respective academic areas as determined by the institution (CAATE, 2012).

Internship is an opportunity for students to apply classroom learning in clinical practice.

Internship in Athletic Training is an opportunity afforded to either undergraduate or graduate students to apply classroom learning in clinical practice while involved within an ATEP. This typically occurs within the last year or two of the curriculum program but is not always limited to this timeframe or circumstance. In some cases, internships may occur after the
athletic training student has graduated and received his/her certification as a means to gain further work/hands-on experience.

*Internship route in athletic training*, now obsolete, was once a means to achieve the required clinical education hours in order to qualify for the Board of Certification (BOC) exam. It has now been mandated by the BOC, that a student must be in route to graduate from an ATEP in order to sit for the BOC exam.

*National Athletic Trainers’ Association (NATA)* is the organization that set standards and criteria by which athletic trainers can be deemed as respected allied healthcare professionals (Weidner & Henning, 2002).

*Program Director* is responsible for assurance of ongoing compliance with the standards of CAATE; planning, development, implementation, delivery, documentation, and assessment of all components of the curriculum; clinical education; programmatic budget. This person must be certified and be in good standing with the BOC, possess a current athletic training credential and be in good standing with the state regulatory agency, and must be qualified commensurate with other administrative positions within similar healthcare programs in the institution (CAATE, 2012).

**Delimitations**

Through the ATEP directors’, clinical education coordinators’, and faculty instructors’ perspectives, this study was intended to unveil information in regards to the value of internships in Athletic Training Education Programs. The researcher sought out 3 to 5 members from the three disciplines chosen from any number of the 9 southern region institutions selected that had an ATEP and that employed individuals that served in the capacity of the aforementioned positions. These institutions were selected based on their history of some form of internship.
involvement supported within the curriculum over the course of the last 3 years. Since the participants were employed at various institutions located in differing states, their experiences were reflective of not only the culture of the ATEP in which they worked but also of any others that they had previously been associated with. Utilizing this approach allowed the opportunity to gain different perspectives and added to the overall depth of the study.

**Limitations**

There were limitations associated with this study. First, because of the nature of the study and the various opinions represented by different members of the ATEPs, it was assumed that not all perspectives offered were similar based on the fact that each participant’s position within the ATEP varied. Furthermore, there may have been bias present due to the nature of the ATEP in which they resided and the level of interest they had in regards to internship experiences overall. The presence of such bias may have stemmed from their personal experiences and whether or not they were involved in some form of internship-style learning environment during their own preparation for athletic training.

**Organization of the Study**

Chapter One provided an overview of the study, which assessed the potential value of exploring internship type learning experiences through the perceptions of program directors, clinical education coordinators, and athletic training faculty instructors from various institutions located within the southern region of the United States. The overview included the research study’s purpose, its significance, the research questions, delimitations, and limitations. Chapter Two provided a review of the current literature that existed in reference to internships and co-operative programs of college students and college graduates, beginning with internships and co-operative programs in general and then narrowing in focus towards the field of athletic training,
the history and background of the evolution of the profession, clinical education aspect of curriculum, and both perceptions and assessment of quality of education. Chapter Three discussed the methodology by which the data was be collected and analyzed. Chapter Four provided themes derived from the interview data and analysis of documents from ATEPs. Finally, Chapter Five presented the conclusions of this research and implications for further research.
CHAPTER II
LITERATURE REVIEW

The purpose of the literature review for this qualitative study was to explore existing research on internships and examine the value of internship type learning and clinical education in the career preparation for athletic training students. This literature review was intended to demonstrate how higher education, healthcare, and athletic training all share a common thread in regards to experiential learning. This literature review was divided into four main sections in order to explore the notion of integrative work experiences and how it fits within the educational aspect of athletic training curriculum. The four sections included Kolb’s Experiential Learning Theory (ELT), experiential learning in higher education, experiential learning in healthcare, and experiential learning in athletic training.

First, in order to gain a better understanding of the broad topic of internships, this literature review began by taking a look at experiential learning and Kolb’s Experiential Learning Theory (ELT). This section examined how Kolb’s ELT can be utilized to gain a better understanding of not only how a student learns but more importantly how a student reacts to a learning environment that exposes them to various experiences. By understanding the style of a student’s learning ability, educators can only hope to enhance the student’s overall educational experience and thereby ultimately contribute to the student’s success in future professional endeavors.

Second, by taking a look at experiential learning in higher education, this section of the literature review was broken down into various subsections that explored internships and the
various aspects of this type of learning experience. These subsections included but were not limited to: a historical perspective on professional education, realization for reform, current trends in higher education, and the concept of internship. Each subsection revealed an aspect of higher education that was pertinent to understanding how internships and experiential learning has evolved over time and what drives the educational force of today’s society.

Third, the review of literature then narrowed by taking a look at experiential learning in the fields of the healthcare profession. This section started with examining various facets of medicine and then looked at medicine as a whole in regards to professionalism and continued education. The intent was to provide a better understanding of how internship type learning can and has been implemented into enhancing education in the field of medicine.

The final part of the literature review explored athletic training education and how internship style learning is incorporated into the curriculum for athletic training students. First, this portion of the literature review began by providing a brief description of the history and background of the evolution of athletic training education, the certification process, as well as providing a view on clinical education in order to gain a better understanding of the field of athletic training. Second, learning styles and techniques of learning were examined to determine the importance of understanding the diversity that plays into the overall learning experience of the athletic training students. Third, clinical education was examined to determine its impact on the overall educational experience. Fourth, and last, both perceptions and assessment of quality were evaluated in order to gain a better understanding of what research has been previously done and what improvements are still in need.
Experiential Learning and Kolb’s Theory

Recent scholarship and critique has prompted Higher Education to question the value of education that students are being given (Arum & Roska, 2011a; Arum & Roska, 2014b; Hacker & Dreifus, 2010). In fact many parents often question, and are encouraged to ask, what they are getting for their money when it comes to their child’s education (e.g. what methods are being used to prepare college students to transition into adulthood in other aspects of their lives; how are colleges enhancing critical thinking skills and complex reasoning) (Arum & Roska, 2014a). Within the last decade, there has been an increased emphasis on the undergraduate experience and what it has to offer to the students (Brown, 2004a). The quest for finding an answer to this question has and continues to challenge researchers to consider the many factors that can play a defining role in the student’s overall educational experience.

Brown (2004a) argued that college is a place in which students can develop wisdom through orientation, experience, interaction, and environment. Students are exposed to multiple opportunities in which they can interact with others through formal and informal learning experiences. These experiences can vary from coursework to internships and everything in between. As a result, students are led to discover their interests, face challenges, and are exposed to insight on the world around them. Some of the more significant experiences are ones that provide new perspectives, facilitate development of interests, and challenge the student in ways that can be applied in the future. However, in order for an individual to gain wisdom they must be exposed to situations that allow for growth.

Brown suggested that wisdom is a “construct comprised of six interrelating dimensions: self-knowledge, understanding of others, judgment, life knowledge, life skills, and willingness to learn” (p. 137). Self-knowledge is an understanding of a person’s own interests, values, identity,
and sense of purpose, morals and ethics in the sense of physical, spiritual, individual and professional matters. Understanding of others refers to the interest to learn about others in social, systematic, cultural, and individual contexts. Judgment is the ability to make sound decisions regardless of the complexity of the situation. Life knowledge refers to an understanding that is gained both within books and through life experiences. Life skills include the ability to balance multiple roles, anticipate problems, manage time, handle daily affairs, and effectively use support systems to allow for proper management of priorities in ways that allow for the overcoming of barriers. Brown believed that learning from life experiences is the prime way to develop wisdom and that success is a direct result of how much thought and effort one puts into their own future. College is a time in which students can utilize coursework, as well as outside experiences, to facilitate their development of wisdom. Educators should continue to put students in the center of learning in order for them to gain the experience needed for the future.

College provides students with the opportunity to interact with others through various experiences. These experiences may be informal or formal in nature, found both in and out of the classroom, and both on and off campus (Brown, 2004b). With such a diverse student population, it is important to keep in mind that not everyone learns the same. The differences found amongst students can vary greatly and are often a challenge for those in a teaching or mentoring role to adapt to various styles of learning. For educators of all kinds, it is pivotal to embrace these differences and find what works best for each student. One must be able to work with the students’ differences effectively both in and out of the classroom. The key is to help students learn beyond the confines of the classroom and apply their knowledge in a way that is both educational and productive. It is with this notion that David Kolb’s theory of experiential
learning can be utilized to provide helpful information and a better understanding of how to approach different learning styles in education.

As with many of the developmental models, Kolb’s Theory of Experiential Learning (1984; 2005) is a concept that suggests that college is a place for students to explore and learn about themselves (Brown, 2004a,b). More specifically, Kolb (1984; 2005) asserted that a student’s style of learning is directly related to the outcome of what they learn. The way in which a student incorporates his/her knowledge can affect the way in which they engage in life process learning. Kolb’s theory helps to show how learners adapt to the changing demands of learning situations (Salter, Evans, Forney, 2006). Kolb (1984; 2005) found that gaining insight and responding effectively to learning style differences allows for enhancement of one’s ability to challenge and support the multitude of environments that are optimal for student learning (Evans, Forney, & Guido-DiBrito, 1998). Although best known for its learning style component, Kolb’s theory is found to be applicable to adult development as well.

Kolb (1984) described learning as “the process whereby knowledge is created through the transformation of experience” (p. 38). Simply put, people learn from their experience. In a college setting, the results of that learning can be assessed and applied in the form of college credits. Experience-based education is known to be a prominent method of instruction in colleges and universities across the nation today. Internships, work/study assignments, gaming simulations, field placements, structured exercises and role plays are just a few of the many forms of experienced-based education that are offered in undergraduate and professional education curricula. In order to gain a better understanding of the value of internships in the learning experience, it is important to start with an explanation of how and why individuals learn from their experiences in general.
Kolb’s experiential learning theory (ELT) asserts that individuals learn by how they experience the world, by reflecting on their experiences and interacting in society (Koob & Funk, 2002). Kolb’s ELT is based on the utilization of experience as a central theory in relation to human learning and development. A topic found to be of interest to some of the most prominent twentieth century scholars including Dewey, Lewin, Piaget, James, Jung, Freire, and Rogers (Kolb & Kolb, 2005), the ELT was a result of efforts to develop a holistic model of experiential learning process and a multi-linear model of adult development. The theory is based on six components, as defined by Kolb & Kolb (2005): (a) learning is the process of creating knowledge, (b) learning should be viewed as a process and not based on outcome, (c) learning is relearning, (d) learning is a holistic process of adaptation to the world, (e) learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world, and (f) learning results from synergetic transactions between the person and the environment.

Kolb (1984) believed that learning is a continuous process grounded in experience and that knowledge “is continuously derived from and tested out in the experiences of the learner” (p. 27). Experiential learning is a process of developing knowledge through the cohesion of four learning modes including (Kolb, 1984, p. 27):

- Concrete Experience (CE), a feeling dimension;
- Reflective Observation (RO), a watching dimension;
- Abstract Conceptualization (AC), a thinking dimension;
- Active Experimentation (AE), a doing dimension

Simply put, these concepts are feeling, watching, thinking and doing (Salter, Evans, & Forney, 2006). Together these four concepts help to create two dimensions that determine a grasping dimension (CE and AC) that aids in taking in information, and a processing information (AE and
RO) that aids in making meaning out of information. Depending on an individual’s learning style, there will be a noticeable preference towards one of these two dimensions.

Heffler (2001) argued that although it could be possible, in an optimal environment, for all four stages of learning to take place in efforts to resolve a problem, most individual learners have a tendency to select a preferred style of learning. Learning styles can be influenced by previous life experiences, they can be hereditary, and they can even be influenced by the demands of the environment in which one exists. The outcome of learning is based on the demands of the experience in relation to each of the aforementioned modes. Ideally, the learner will touch on each of the four through experiencing, reflecting, thinking, and acting – in such a way that is responsive to the situation and what is being learned from it. By doing so, an ongoing and continuous learning cycle is created and will vary based on the individuals’ learning style and learning context (Figure 1 –the experiential learning cycle).

The way an individual learns shapes their personal development. For this reason, the ELT suggests that learning is a key factor in human development. Kolb (1984) suggested that an individual’s style of learning is influenced by educational specialization, career choice, personality type, and current job role and tasks. Different academic disciplines are inclined to impose different demands on learning and are displayed through the “variations among their primary tasks, technologies and products, criteria for academic excellence and productivity, teaching methods, research methods, and methods for recording and portraying knowledge” (Evans, Forney, & Guido-DiBrito, 1998, p. 213). According to Kolb (as cited in Evans, Forney, & Guido-DiBrito, 1998), education in a specific academic discipline is a means of finding the social norms that are relative to that particular professional field. It is commonly found that one learning style often dominates an academic discipline and can create a sense of exclusion for
some. In order for students to excel in various disciplines, educators must go to lengths in providing the students with various instructional and evaluation methods.

**Experiential Learning in Higher Education**

From the start of his first term in 2009, President Barack Obama has challenged the citizens of the U.S. to seek out higher education as a means of broadening their horizons by obtaining the knowledge and skill level needed to become successful individuals. In fact President Barack Obama was quoted as saying:

> In an increasingly competitive world economy, America’s economic strength depends upon the education and skills of its workers. …To meet this economic imperative, I ask every American to commit to at least one year or more of higher education or career training and set a new national goal: by 2020, America will once again have the highest proportion of college graduates in the world (Bowen, Chingos, & McPherson, 2009, p.1).

Since that time, Americans have strived to rise to the challenge. According to Perlin (2011), approximately 9.5 million students in the U.S. attend four-year colleges and universities. Of that 9.5 million, roughly 75 percent take part in at least one internship type experience before they graduate. The presence of this style of learning is continuously evolving. In the 1960s, internships were mainly restricted to the field of medicine. In the 1970s, it was beginning to take shape in other professions and finding its way to larger companies and other academic fields. Although still somewhat scant in existence in the 1980s, the presence of internships in today’s world is highly noted and trend worthy. In fact, an estimated 1 to 2 million people participated in internships on an annual basis in the U.S. alone. From a global perspective the numbers are well beyond that measure. It could easily be argued that interns are “one of the fastest-growing categories of American worker” (p. xiv).
Historical perspective on professional education.

Looking back on the origins of integrative work experiences in America informed this exploration of internships in academic settings. The concept of integrative work experiences dates back decades and even centuries ago. During the colonial times, apprenticeship played a key role in professional education (Brubacher & Rudy, 2002). Those who studied law, theology, or medicine took part in a two-dimensional education comprised of both theory and practice. It was through the observation of trained professionals that the young pre-professionals sought to gain official status by imitation of their elders. The novice student provided assistance to the experienced practitioner in exchange for learning the necessary skills to function. Assigned tasks ranged from simple duties such as the young law clerk penning copies of papers like wills and deeds and the young physician washing bottles, to more advanced skills such as serving writs, filing actions, mixing drugs, and bloodletting. Though it may have seemed skewed in quality, the need was met to obtain the competence required for practicing standards of that time. Regardless, there were concerns over quality even then.

George Bernard Shaw once said, “he who can does, he who cannot teaches” (Stevenson, 1956, p. 1971). It is a phrase that has been used many times since its origin and one that can hold very true to its meaning. Being a successful physician, lawyer, or minister (theologian) does not mean that person is capable of being able to effectively share the knowledge that they possess (Brubacher & Rudy, 2002). Aside from some professional’s inability to teach, a busy career may have left him or her with too little time for the development of a specific pedagogical talent that they could share. This was true in the case of many professionals during early times. Other restrictions stemmed from the confines of learning within the empirical period of a discipline’s development. There were few privileged youth that had the luxury of studying
abroad in outlying countries. These restrictions often hindered the professional’s opportunity to further develop their skills and share those learned skills with the youth of the profession. Knowing these restrictions, future generations began to explore ways in which they could improve in this area.

Professional schools sprung forth from the revolution in apprenticeship style learning. Schools of law and medicine where front runners on the horizon. During the next century these schools found ways to teach to the masses by gathering as a collective group and offering some degree of specialization to the future practitioner. These schools were didactic. Whereas once a philosophy of doing held reign, telling through lecture now took form. Students were offered an education in which the practitioner-teacher provided their professional experience via means of summarization and thus leading to a more economical approach for the student in regards to both time and effort. Though the standards of education were still at question, the evolution of education continued. The changes were not always for the better.

At about the time of the Civil War, Harvard awarded degrees in medicine to anyone who could pass a multitude of oral tests in one day (Brubacher & Rudy, 2002). Diplomas were handed out with ease and the prestige of the professional student was on a steady decline. Egalitarianism led way to even more change. The realization of a need for a broader scholarship took form, one that combined both practical and academic merits in areas such as law, theology, and medicine. Harvard and Princeton played key roles in taking education to a new level in these fields of study. With these changes came heightened entrance standards and the risk of decreased enrollments. Charles W. Eliot, President of Harvard during the post Civil War period, was among the first to take such a risk. Though a rough start, this new idea led to a level of respect for the professional that had once been lost. The turn of the century brought forth
professionals who had been subjected to college and professional or graduate instruction throughout their education. The twentieth century posed a time in which a mere bachelor’s degree would no longer suffice in the standards of enrollment for many of the more distinct professional schools, especially those of law and medicine. The once independently incorporated professional schools soon merged with the traditional academic institutions to gain both prestige and a place in academia.

To add to the laundry list of enhancements taking place in education during this time, self-regulation of the professions played an integral role in raising the standards of practice. Committees and councils were formed by the American Medical Association and the American Bar Association to take a more in-depth look at educational reform, establish standards of practice, and set criteria for admittance into school and for professional rankings. Institutions were now being ranked according to the education in which they provided and the bar was continually being raised in competition amongst educators. It became more prominent that professional competence could not be achieved without graduate study. Though many institutions of this time offered professional study only at the undergraduate level, many of the more prestigious universities began to establish graduate professional schools in fields such as architecture, business, and education.

Charles William Elliot, in his inaugural speech at Harvard, said, “the actual problem to be solved is not what to teach but how to teach” (Brubacher & Rudy, 2002, p. 212). Not only was this true for the time in which he made the statement but it continues to be true today. The quality of training in professions moved from an empirical to a theoretical stage and mimicked more of the spirit of higher learning, one in which the pursuit of knowledge was sought strictly on its own account. The once narrow practice of the would-be professional advanced to the
broader theoretical notion of professional preparation. In spite of the role in which theory has come to play in professional education, there continues to be a need for balance between both theoretical and practical aspects of higher learning in many fields of study.

**Realization for reform: A turn of the century.**

History reveals that both a prominent and genuine need for reform in professional education took place in the early 1980s (Bailey, 1995). It was during this time that education reformers noted the correlation between inadequate education amongst U.S. workers and the economic challenges posed by competing and more advanced countries such as Japan, Germany, and other parts of Europe. To answer this challenge, the initial thought was to return to the traditional education system that was believed to pave the way for the economic rise in the U.S. after World War II. However, it was quickly found that the more strict requirements for academics in relation to high school graduation fell short of solving the problem. Once reformers stopped and analyzed the competition, it was discovered that competitors such as Japan and Germany placed a strong emphasis on the pertinent role of the workplace in their education systems.

In looking at the U.S. education system, during this time, it was evident that the secondary school systems were mainly focused on college preparation thereby leaving behind students who were not college material. Whereas college admissions analyzed potential students based on high school records and SAT/ACT scores, employers had no real use for such. The students not bound for college were often left wandering about the workforce from one low-paying, low-skill based job to the next with little direction and support from their high school in terms of future career opportunities. Many of these students were left with the realization that they would likely find themselves in these same dead-end jobs after graduation and found little
incentive to work hard in school as a result. The notion that young people knew little about work, what it took to find a career, and how to be successful in the workforce was apparent. However, schools were doing very little to provide a learning environment that nurtured understanding and growth in this area. In the late 1980s and early 1990s, there was a vast array of experimentation that took place across the U.S. Although some of the concepts had been common for years, several models were developed to enhance this style of work-based learning. These models included but were not limited to cooperative education, technical preparation programs, career academies, occupational-academic clusters, and youth apprenticeships (Bailey, 1995).

Some could argue that work-based learning started with cooperative education (Bailey, 1995). Developed in the early 1900s, this method of instruction was geared towards vocational education for “individuals, who, through written cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction, by alternation of study in school with a job in any occupational field” (Bailey, 1995, p. 7). The 1990 amendments to the Carl D. Perkins Vocational Education Act of 1984 not only more clearly defined this concept but also made way for the support of other existing ideas such as technical preparation programs.

Another form of work-based learning has included technical preparation programs. Dating back to the late 1960s, these tech-prep programs included a work component in conjunction with classroom learning in either the last two years of high school or two years of community college education. These programs required the collaboration of the schools and employers in order to provide a curriculum experience leading to a career specific certificate or associates degree.
Career academies, a form of work-based learning created around 1970, sprouted in Philadelphia and spread across the states to as far as California. These academies were often viewed as a school within a school whereas smaller and more specified environments were maintained within the operation of a larger institution. The curriculums are based on instructional techniques involving both team-based and practical projects and are focused mainly on one particular type of occupational or industrial focus. The issue with this style of learning was that work placement, although intended to have a clear role, was a concept often left underdeveloped.

On a larger scale, a form of work-based learning known as occupational-academic cluster programs were created to aid in providing more career options. These types of programs offer options for particular career pathways by linking a cluster of occupations to a related sequence of courses. This allowed for student exposure to multiple careers before deciding on which occupational cluster that would most likely lead them down a more successful path to their occupation of choice.

Finally, youth apprenticeships were quickly pegged as the more ambitious of the work-based education programs. These programs are modeled after the German apprenticeship system. Students have the opportunity to learn both job-related and general employment related skills as they were paid for their time to work under the tutelage of a supervisor. The idea behind this model is to tie in vocational learning with that of the classroom curricula. Many of these models are designed to coordinate secondary with postsecondary education. Although this method of learning can be more fruitful for the student, it is a more laborious task for the employer and was not found to be as commonplace in the past.
There lies one common thread amongst each of these models of work-based learning. Each was designed in an effort to enhance, not undermine, classroom learning. The intent being to apply classroom concepts to problem solving skills in the workplace meanwhile preparing them to become active learners and achieve marketable skill sets. As a whole, each model is designed to prepare students for future careers.

**Current trends in higher education.**

“It has long been held that people learn best when they learn skills in the context in which the information is used” (Bailey, 1995, p. 56). Recent research has found that students involved in internship type learning are 10 percent more likely to obtain a sense of fulfillment based on the skills and knowledge gained during an internship experience (Sandoval, 2012). This particular type of experience-based learning allows for students to not only better prepare themselves for their future profession but also allows for growth and development in effective communication skills that will be useful to their success. In some instances institutions with internship programs, like the University of Cincinnati, have a long-standing tradition that has spanned over more than 100 years (Weible, 2010). On the other hand, some institutions of higher education, such as Clemson University, are becoming more aware of the value of internships and are making efforts towards implementing more programs that allow for such experiences (Sandoval, 2012). Regardless of when these programs were started, it has become more and more evident that internship type learning is consistently taking a stand for its role in career preparation. With an increasing number of calls for higher education to address workplace deficiencies and improve the economy (Arum & Roska, 2011b; Roska & Arum, 2012; Wood, 2011), the need for acquired skills and more experience is pertinent to its growth and development.
Changes in curriculum have become more reflective of the need to “enhance students’ communications (oral and written), problem-solving or critical thinking abilities and related dispositions, information competencies, or teamwork and collaboration” (Jones, 2002, p. iv). Students are being required to take more active roles in their education by solving real-world problems, reflecting on real-life factors and making judgments within reason of their knowledge base. The reform does not stop with the students though. Educators are being required to facilitate learning more and monitoring workload less lending way for enhanced independent learning. More advanced measures are being taken to assess student learning and to determine the extent of learning outcomes.

Jones (2002) argued, “undergraduate education should provide students with the necessary skills, abilities, attitudes, and values that are critical to successfully navigate the dynamic complexities of the business world” (p. 1). Students majoring in professional programs have always been faced with the challenge of gaining the most knowledge possible within the scope of their sought after area of technical expertise. Employers of today are seeking out employees who are good problem solvers, leaders, critical thinkers, good communicators, and still have the capability to learn.

Changes in technology have altered the way in which businesses are able to interact with professional colleagues and customers, thus creating a more global economic system that requires a greater understanding of different cultures, values, beliefs and behaviors. The demographic makeup of the workforce itself has greatly impacted various markets within the business world. Changes in gender, age, national origin, and racial and ethnic backgrounds of graduates will continue to play an integral role in the inner-workings of the business world.
These changes only scratch the surface of what the future holds yet they all have a great impact on the continual revision and reform of the professional education curriculum (Jones, 2002).

Our country is at a critical juncture in regards to work-based education (Linn, Howard & Miller, 2004). Many are faced with the challenge of determining how to become successful workers in a competitive new world. It has been suggested that academic programs are inadequately providing the skills needed for students to perform competently as a professional in the workplace. So how do we find a solution?

Some institutions have explored the concept of service learning as a means to provide students with an improved pedagogical experience. Hughes, Steinhorn, Davis, and Beckrest (2012) argued that students can learn more about social justice issues facing a community when challenged to apply learning from within the classroom to community service and then reflecting on their experiences. In this sense, students are actively involved in their education in a way that experience is linked to coursework. This type of understanding can lead to a greater understanding of the complex world of social inequities and the effects of poverty. It has further been found that participating in service learning courses have led students to become more knowledgeable in regards to the causation of social inequities and creates an awareness of the role of privilege in relation to these inequities that may otherwise not exist in their understanding. According to the researchers, Kolb’s learning theory can be utilized to explain the student’s need for frequent reflection to properly integrate service experiences and classroom learning in order to establish new perspectives and views of the world.

Partnership programs among departments are another means to bridge the elements necessary for an effective integrative experience (Whitt, Nesheim, Guentzel, & Kellogg, 2008). Linkages between departments allows for a combination of expertise and the resources to meet
the students’ needs for learning. By creating these types of learning environments, students are engaged in their own learning in a way that it is almost seamless in nature. The researchers believed that “effective partnerships among those who have the most contact with students…fuel the collaborative spirit and positive attitude of these campuses” (p. 236). These programs foster student engagement and therefore enhance student learning, development, and persistence in their studies. Student engagement causes the student to appreciate the time and effort that it requires to make their learning experience more fruitful and leads to an awareness of the institution in the services and resources allocated towards the support of these experiences. The role that the institutions play in establishing structure, creating programs, and organizing curricula becomes influential on the outcome of student learning. Regardless of resources, an effective partnership programs can flourish anywhere given the right mindset as long as the institutional mission is respected and the needs of the students are being met. However, many institutions have become fragmented in a way that hinders the student’s educational experience. Nesheim, et al. (2007) supported the argument made by Terenzini and Pascarella regarding student learning and the negative effects of fragmentation. Their argument posed that we as educators have lost sight of the bigger picture both organizationally and operationally. Educators must find ways to teach to the way in which students learn. In order to capitalize on the influence of both in- and out-of-class experiences, a new mindset towards student learning and functional interconnectedness is needed in regards to academic and student affair divisions. By encouraging students to seek out what exists both inside and outside of the classroom, as well as applying what they have learned, the boundaries of learning become blurred in a way that makes all environments seem as one.
Cooperative education, otherwise known as internship, can provide students with opportunities that allow for education outside the confines of the classroom and therefore better prepare them for the outside world (Linn, Howard & Miller, 2004). This style of learning helps the student be prepared to adapt to the changes they may be faced with, develop self-confidence to manage their career, and gain experience through varied work environments before going out into the working world. Similar to that of educators in the classroom, co-op educators must also demonstrate the students are meeting the required learning outcomes. In a climate in which learning outcomes have become of heavy focus, accreditation programs now insist that educators define, measure, and revise programs based on the results of these learning outcomes. Educators in this style of learning are constantly battled with proving the legitimacy of hands-on learning as a means to a more solid education.

Some institutions support programs that allow for opportunities of international internship experiences (Mather, 2008). By studying abroad the students gain a sense of interconnectedness between both their own country and that in which they have studied. In many instances, these students quickly obtain a personal connection with their work and a new appreciation of service through their work. Not only do these experiences help to shape the students’ views but also to create environments that foster the coursework and intellectual challenges necessary for the pursuit and development of future career interests and goals.

“Getting the hookup” as Parks-Yancy (2012) refers to it, is one way of describing the concept of social capital in which students have the opportunity to enhance their skills in relation to a future career choice. For example, a student can learn more about becoming a college professor by serving as his/her professor’s teaching or research assistant. These types of social relationships allow sharing of resources among individuals with a common interest. These types
of resources make it possible to receive training, potential for future employment, and opportunity to receive a higher starting salary and/or a better job starting out. Ultimately, it all begins with the student’s level of involvement while in college. Getting involved in campus organizations, by participating in internships, and utilizing the campus career center, the students position themselves to be more prepared in the pursuit of occupations after college than their counterparts who do not take advantage of such opportunities. In addition, it is likely that the use of such resources will aid in career trajectories. Students who have utilized these resources tend to not only find employment faster but also get better jobs in the process. With recommendations from already established individuals in the field, students are more likely to get hired than by simply applying for jobs on their own. Not only are these experiences beneficial at the time of initial job search but they will also aid in the future goals of that individual’s career.

More specifically, in terms of law school reform, they too are constantly looking for ways in which they can enhance curriculum. According to Sale (2008), these types of programs must strive to provide educational opportunities that allow for the students to be able to successfully link the practitioner to those they are serving. Some of the previous methods of study, such as case dialogue, created gaps in training on both a moral and ethical basis. Overall, there is an overabundance in lack of courses that challenge these students to participate in “real-world” experiences. The researchers believe that the only way to correct this is through an educational experience that provides hands-on training that is of some ethical substance and value. Ideally, educators would create an environment that will help to increase understanding and lead to better decision making as a professional. Integrating practical experiences into the curriculum could
also enhance the second and third years of the program. Overall, education that is integrated well will help to create a sense of learning by doing which is similar to that of medical school.

According to Bell (2012), some institutions have found first-year experience courses to be a means of successful intervention in terms of the social and academic life of the university. An example of this type of course could be one that provides the student with course content via a wilderness setting. The object is to provide the student with an experience that is engaging and aids in their transition within the university. By engaging the students in a learning activity that challenges them either physically or mentally, the students learn to adapt to their surroundings and become more aware of how to deal with change in their environment. The courses can include scenarios, offer opportunities for peers to work together on projects, and participate in active learning, all of which help to promote student engagement in higher education. It has been suggested that colleges should seek to reform education in a way that promotes these types of active pedagogy type courses.

Similarly, simulations can be used to motivate students, aid in goal achievement, bridge gaps between disciplines, and foster deep learning (Welkener, 2003). They can provide classroom events created in terms of sequential decision-making in which students must fulfill roles in managing discipline-specific tasks. Such courses can include role-playing, cooperative learning, case studies, and problem-based learning. Welkener believed that simulations offer the students experiences that pose challenges of the real world while under the tutelage of an experienced supervisor. With reports of increasingly disengaged students becoming a trend in higher education, it may become necessary for institutions to take action in order for the students to receive the maximum benefit from their college experience (Bell, 2012).
Through the use of the Student Learning Imperative, the Principles of Good Practice for Student Affairs, and Good Practice in Student Affairs, Smith and Rodgers (2005) argued that each could serve as a model for guidance of design and implementation of practice in student affairs. Student Affairs staff members share common core values of student-centered practice, active student involvement, achieve diversity, collaborate within and across departments, emphasizing development of staff and learning approach of students, and recognizing the staff as being the most valuable. With active student involvement being one of the key values, it was argued that these types of experiences should require significant student involvement and responsibility, seek out students for participation, encourage peer mentoring by the students, and increase the level of responsibility and/or leadership by the student.

Mangum and Wruck (2011) argued that the environmental changes of business are reason enough to “rethink” the way business education and the MBA programs are designed. Many companies are leaning towards the concept of “hiring undergraduates and train them ourselves” (p. 661). In a quest to define the core curricular offerings of business programs, the researchers found that many programs had similar core curricula especially those that were considered to be on top in terms of education. Most programs focus on two types of curricula: academic and practice-oriented. The idea here is to create an overall goal of “rigor without rigor mortis” (p. 662). Educators in this field are continuously seeking ways to find balance within the curriculum. Keeping in mind that competition is what fuels the need for change, the demands on education are often driven by the idea that earning comes from learning.

**Concept of internship.**

Perlin (2011) described internships as “a world of spin” (p. xi). The reason being is that there is no true meaning to the word internship. The word internship itself is a “smokescreen”
that is used more as a brand than any particular job description. He described this concept more fully when he said, “until just a few decades ago, the word referred almost exclusively to a particular period of hands-on apprenticeship in the medical profession” (p. xi). In theory, Perlin believed that internships are what you make of them and therefore you can spin them however you want regardless of whether you are the employer or the intern. In its own right, the internship “has become a new and distinctive form, located at the nexus of transformations in higher education and the workplace” (p. xi). Although the internship is considered a latecomer to the field, its strong and unrivaled presence in the world of white-collar work is now supported by government policies across the globe. Furthermore, the internship has been touted as a vehicle for getting work experience in a slow economy or as an exploitive way for employers to get free or reduced cost labor (Mihelich, 2014; Perlin, 2011).

Internships have spread globally over the last few decades to nearly every industry. They can now be found in almost every country and are commonly encouraged by institutions of higher education as a means to connect with the world of business and professionalism. Today, even pop culture has gloated over its newfound respect for the intern through its media transpositions of the world of internship. Television shows like the “Apprentice” or “Celebrity Apprentice,” with Donald Trump, place individuals in a business type setting where they are forced to sink or swim in order to triumph as the last man standing, so to speak. The popular MTV (Music Television) show “The Hills,” which aired from 2006 through 2010, starred Lauren Conrad and Whitney Port who were cast as interns in the fashion industry of Beverly Hills. Even David Letterman and Jay Leno acknowledge the world of interns through colorful skits of characters portrayed as subordinates engaged in learning the ropes and affectionately as peons (Perlin, 2011).
Interns can be found anywhere from TV weather reporters to newsletter writers for churches, lipstick sales representatives to trash collectors, coffee shufflers in newsrooms to human genome builders. They can span from Hollywood to Congress and even across the globe in foreign nations. Some supervisors subject interns to undignified tasks they would not normally do themselves, let alone, do for others. There are even some countries that go to the extremes of requiring “social internships” as a part of school curriculum leading teenagers in the Netherlands to intern as prostitutes (Perlin, 2011). Although some of these examples are a bit extreme, I believe the general idea is that internships can take shape in many places and in many forms.

Hursh & Borzak (1979) claimed that the primary objective of internships is to expose students to a whole new world of perspective outside of that which they are able to learn about in the classroom. It can offer an opportunity for advanced career planning and provide a means to bridge the gap between academics and the work setting. Although only one of many learning experiences, it can lead to a sense of finding one’s self and development of autonomy. By providing awareness to new views of the outside world, internships can often lead to a shift in one’s perspective. A world that once appeared to be portrayed in black and white now has newfound multiple shades of gray in which the student and young professional must decipher in order to form their own opinion.

Stanton (1978) asserted that programs dealing with internships should have certain objectives in mind. He described four levels of objectives that should be met when implementing student internships. First, there should be a level of career awareness created. Second, internships should enhance faculty awareness and implement an understanding of workplace needs. Third, internships are to provide students with specific skills training and an
experiential base to further facilitate career opportunities, as well as encourage faculty to provide courses that compliment career interests. Fourth and final, students’ participation in a full time four week experience of “on the job” training, gives opportunities for new shared experiences supporting learning through oral presentations and written reports, provide credit for experience, and encourage others to participate. With each of these in mind, internships should offer students both the advantages of a liberal arts education and the practical work experience needed to excel in their future careers. The thought here is “to create an atmosphere in which classroom theory can be fused with practical experience” (p. 76). These programs should lay a firm foundation providing both a frame of reference and an intellectual base from which to draw perspectives and conclusions. Similar to that of any liberal arts programs of study, internships should support and stimulate student learning through experiences that offer opportunity for ethical judgments, clarification of values, understanding of potential and relation to overall life.

An effective internship experience is one that leaves the student feeling prepared for the future (Renn & Jessup-Anger, 2008). It is one that ultimately allows for an easier transition due to the nature of having that previous work experience. Practical experience in itself is often perceived as aiding the success of job transition. The researchers argued that academic coursework in conjunction with hands-on application have been viewed as one of the more beneficial routes in education. They further argued that the role of supervisors and mentors is one of major importance within the internship experience. Having someone to provide support and be able to consult with on ideas can be what makes or breaks the overall experience. Yet regardless of efforts made for support, the outcome is intended to be one that allows the student to transition from role of dependence to one of independence. One such notion is to allow
students to observe in various areas within the profession in order to determine their interests and in turn, broaden their understanding of the profession.

Many believe that internships provide practical work experience that is not to be underestimated (Surujlal & Singh, 2010). The recent recognition of worth of practical skills gained in the workplace through internships are significant and have lead to an increasing popularity as a means to bridge the gap between the classroom and the workplace. By implementing experiential learning components in the curricula such as guest speakers, internships, service learning, site visits, and field-based coursework, higher education institutions are finding ways to address previous limitations in regards to student preparation for the workplace.

Weible (2010) revealed that internship experiences can be beneficial to not only the students but also to the employers hiring these students and the educational institutions offering these types of programs. Student benefits may include: better job interviewing skills, better networking, more job offers, job offers sooner, better preparation for career, stronger resumes, more academic credit earned, higher starting salaries, more money earned, higher job satisfaction, higher extrinsic success, improved job-related skills, improved creative thinking, and development of communication skills. Employer benefits may include: better hiring decisions, first choice of best students, higher caliber of future employee availability, creating networks to colleges and universities, fulfilling social responsibilities, exposure to new ideas, and receiving part-time help. University benefits may include: networking to the local community, improved student recruitment, improved reputation, smarter students, new scholarships, practitioner input, other forms of funding, and external curriculum assessment.
Knouse and Fontenot (2008) illuminated that internships “may create realistic expectations about the world of work and help clarify students’ career intentions” (p. 61). These researchers suggested that the benefits of internships range from helping students find jobs, to creating a stepping-stone towards applicability to full-time job experience, to creating both a motivating and satisfying experience that allows the students to continue along a particular career path. These students will likely have more of an advantage in the job market and will be more readily hired into positions of employment.

Hindmoor (2010) believed that internships provide opportunities for students to apply knowledge and skills acquired during their studies in an applied setting. Students are often encouraged to recall their knowledge and to continue to gain understanding in how that knowledge can be applied through this unique learning experience. In the world of politics, internships are believed to enhance understanding and ability to analyze phenomena. These experiences expose students to other valuable concepts found within their studies such as networking, community engagement, accountability, and public service. Furthermore, these experiences can explain how and why concepts such as these are beneficial to the student’s understanding of policy and the process entailed.

Thiry, Laursen, and Hunter (2011) revealed that the value of internships and experiential education is one that is understood but not well proven through research especially in regards to the STEM field. Research-based learning has quickly become the new standard for undergraduate education. However, there is no strong evidence that finds outcomes based on student participation in these activities. The researchers within this study found that there were few studies that documented outcomes in outside learning experiences. What they did find was that involvement in internships is very high. In fact, three out of four students typically
participate in internships during undergrad. These experiences provide potential for personal, professional, social, and intellectual development by helping to increase leadership skills, interpersonal skills, communication skills, and overall cognitive development. Not only do students have a sense of gain in self-confidence but they also experience overall enhancement in personal growth. Students have reported a newfound ability to take initiative in problem solving, independent thought, and responsibility for their own learning. In many cases, it was argued that students felt as though the classroom could not provide them with the same learning opportunity as the out-of-class experience they gained through the internship. Students reported gains in skill as the primary outcome from their experience. In addition, it was found that when students were challenged to create an identity for themselves they often do. Overall, internships and clinical programs offer the students opportunity to clarify career goals, develop professional identity, and take ownership in their career.

**Satisfaction with internship experiences.**

It has been argued that satisfaction within the internship experience can be based on several factors including: exposure to different parts of the business, clear tasks, ongoing feedback, respectful treatment, and challenging assignments (Knouse & Fontenot, 2008; Rothman, 2007). In some cases, high-impact internships are viewed as a more effective means to a satisfactory experience for the students. These types of internships can be described as: effortful, helpful in building substantial relationships, helpful in engaging students across differences, able to provide rich feedback, able to apply and test situational learning, and able to provide opportunities for reflection (O’Neill, 2010). In other cases, satisfaction is measured based on quality of supervision and climate (Jaarsma, et. al, 2009).
Although internships are often viewed to be beneficial experiences, some research has suggested that students do not always view their experience as a positive one (Tse, 2010). In some instances it was found that there have been discrepancies in student expectations and satisfaction in placement of internships. For example, the literature reviewed by Tse (2010) discovered that there were discrepancies among student perceptions of work experience and actual work experience that indicated a lack of realization in regards to the overall benefit of the internship. It was further found that such discrepancies could negatively affect students’ career choices after graduation. Findings such as these, aid in proving how critical proper placement is to the outcome of the overall internship experience.

The prestige of the internship sponsor is often viewed as an indicator of the quality of the experience available to the student (Stanton, 1978). Those who represent bigger businesses, industries, and government agencies often provide opportunities with more in-depth experiences and interactions between the employer and the intern. A good indicator of a quality internship experience is often noted by the potential for the intern to become a future employee. If the sponsoring employer hires a student for a position, then it can be assumed that the student was afforded the opportunity to learn what the job entails and to prove that they are capable of carrying out the tasks properly.

Change for the future.

There are more students participating in higher education now than ever before (Hu & Kuh, 2003). Information is essential in today’s world and college is a means to providing the knowledge, skills, and competencies necessary for success. Student engagement plays a vital role in learning and development of the young impressionable minds of our future career seekers. The quality of students’ efforts towards the utilization of their resources is an indicator of their
investment being made into their education. One way for colleges and universities to ensure that such activities take place is by creating a level of organization that fosters student engagement through resources such as curriculum and career related programs.

A college student’s level of knowledge is a product of his or her effort towards learning (Hu & Kuh, 2003). A good indicator of a student’s understanding is a direct result of the amount of time that they devote to their studies and activities of an educational purpose. Colleges and universities that place emphasis on activities of a scholarly and intellectual nature can positively affect learning in the sciences, education, and technology. With that being said, finding ways to promote student learning should be the main objective of institutions of higher learning. By understanding what activities help and hinder student learning, colleges and universities can develop positive learning environments that nurture student learning and minimize inhibition.

Students who are engaged in useful experiences both early on and throughout their collegiate study experience an easier transition within the university (Bell, 2012). Some colleges and universities have even found ways to get students involved early on in their academic careers by implementing what is known as an adventure class. Similar to that of the hands-on learning experience within an internship, adventure-based courses help to challenge the student in a way that can effectively enhance their ability to adapt to their environment. Although these courses offer learning through a more recreational style, the students have the opportunity to interact with peers, actively learn, and engage in challenging activities that promote higher education like that of the internship.

**Professional education.**

In order for college graduates to master the skills needed to become more effective in the ever-changing demands of the workplace, professional education programs must constantly and
consistently re-evaluate their overall curricula and determine the best methods in which they can help to prepare students (Jones, 2002). Typically, professional programs involve three areas of emphases: informing, helping, and enterprising (Jones, 2002). Among these three areas, there has become a certain level of expectation that are associated with the key competencies and attitudes of graduates and their desire to be successful. The ability to display a strong correlation between technical knowledge, ethics, values, and attitude while making judgments regarding issues that are relatively ambiguous, is often noted to gain a person the status of being known as competent (Jones, 2002).

Stark and Lowther (Jones, 2002) have identified what they determined to be four sets of competencies that are common across professional fields: conceptual competence, technical competence, integrative competence, and career marketability. The term conceptual competence refers to understanding a profession’s foundation of theory. Technical competence refers to the skills required by a particular profession and the ability to perform those skills. Integrative competence refers to the ability to apply both theory and skills in a practical sense and setting. Career marketability refers to the education and training that students obtain in order to make them more desirable job candidates. Professional education programs that are considered to be strong and successful programs harbor the idea of conceptual competence but also understand the importance of providing the student the opportunity for personal growth and development in these four areas as well.

Today, college graduates are expected to convey their ideas, information, and solutions to problems in a way that exonerates their ability to be effective listeners and learners (Jones, 2002). They are expected to carefully consider their options before making sound decisions. Nurturing this type of learning allows the students more opportunity to be open-minded and
flexible when it comes to working with others. This is an attribute of extreme importance, especially since most professions require interaction with others in order for goals to be achieved.

Carnevale, Gainer, and Meltzer (Jones, 2002) have identified what they believed to be keys to success in the workplace in regards to competencies that are associated with professional education. These competencies are found to be common across the board for most employees in any particular field and include: learning to learn; reading, writing, and computation; oral communication and listening, creative thinking and problem solving; personal management; group effectiveness; and organizational effectiveness and leadership. Learning to learn is described as the ability to decipher between information that is pertinent to the field or not and what actions are needed to improve on performance. Reading, writing, and computation is the ability to effectively understand and convey thoughts in documents that can be shared with others. Oral communication and listening is simply the ability to effectively speak and communicate with others. Creative thinking and problem solving is the ability to think and work out problems in a manner that allows for multiple solutions to be explored and results to be tracked. Personal management is the ability to self-motivate and to maintain high standards in the workplace by setting personal goals that allow for skill development and understanding of the profession. Group effectiveness is the ability to develop skills necessary to work with others, accomplish goals, and complete tasks. Organizational effectiveness and leadership is the ability to understand how things work and the impact that each person can have on the success of the program. Carnevale, Gainer, and Meltzer summarized that “leadership is achieved by cultivating the respect of peers and projecting a sense of reliability, goal orientation, and vision” (p. 7).
The value of professional education is strongly dependent on the success of its practitioners and the outcomes of the public that they serve (Schuh, 2008). Two prime examples of this notion are law school and medical school. It is pertinent that institutions providing professional education teach in a way that allows graduates to succeed in meeting this objective. Far too often do these types of institutions fall victim to placing too much emphasis on classroom style learning and not enough experience in real-world situations that can be applied once out in the workforce. By enhancing the overall learning experience, students not only have increased understanding but also make better decisions in real life scenarios. Like other areas of professional education, the field of law continues to struggle with finding ways to connect analytical reasoning with that of application to practice. Many law schools today are being urged to find ways to integrate lawyering and legal learning in a way that create programs involving more skill-based work and clinical training. These include legal consultation for low-income persons (Fogg, 2013), projects that work with “death row” inmates for legal defense (Bonner, 2012), and legal consultation for undocumented residents (Aldana, Lyon, & McKanders, 2012). By integrating more practice-like experiences, curriculums can provide a better education. This would mimic programs similar to that of medical schools and other healthcare related fields in which a “learning by doing” approach is taken.

**Experiential Learning in Healthcare**

Medical schools have utilized internships as a means of integrative work experience for centuries, dating back to the medieval guilds that characterized the university when it took on its corporate structure and form (Thelin, 1982). Though contemporaneously referred to as residency training, internships have long played a key role in predetermining the success of future physicians (Artino, et al., 2012). However, the prevalence of internships does not stop there.
Many healthcare-related fields utilize internships as a means to better develop their professionals. Pharmacy, nursing, surgical practitioners, and even the field of athletic training all utilize some form of internship or experiential learning to further educate and prepare their emerging practitioners. Though this portion of the literature review will further narrow its focus towards the use of experiential learning in athletic training, it is necessary to first take a moment and look at a more broad perspective of the its use in the medical field in general.

As previously mentioned, pharmacy, nursing, and surgical practitioners were three examples of areas in which internships have been found of value to the education process. Pharmacy has long been an area of medicine that requires internship as a part of its formal education process (Green, 1954). It is believed that the practical experience gained through internship is a key component of the curriculum. Similar to many fields of healthcare, there was once a divide between theory and practice due to ongoing changes in the economy and new developments being made in medicine. Many adjustments have been made over time to find balance between practical and instructional education with an eye towards bridging the gap that once served as a source of disconnect between the two. Change in the curriculum over the years has helped to provide a greater accountability of the profession in response to external demands for improved practice.

Nursing is one such area of healthcare that has faced change due to the demands of the profession. Changes in science and technology, along with the dynamics of healthcare, require practitioners to be able to think critically (Jones, 2002). The settings in which these professionals practice have expanded beyond hospitals walls to independent practitioners, providers of alternative services, and even to managers of health plans. Educators of nursing were often criticized for creating distance between the students and the world of healthcare. In
1998, the Pew Health Professions Commission issued a report that found it was critical for healthcare education to transform in order for these professionals to be successful practitioners. However, the change had to go well beyond the addition of random new topics and courses to offering multiple opportunities for students to gain essential bits of knowledge through competencies in order to properly perform nursing in practice.

Surgical education is another example of an area of medicine that is very supportive of outside skills training (Zeng, Woodhouse, & Brunt, 2010). However, there still remains to be little structure in the 4th year of medical schools regardless of an expressed interest in surgery. Though many medical school programs offer specific training in surgery in the 3rd year of study, there is often very little exposure to continue to enhance surgery skill sets afterwards and is often widely dependent on the rotation that the student was exposed to during that time. With the need for some form of standardization being realized, the American College of Surgeons Division of Education has now established a core curriculum in regards to knowledge and skills expected prior to entering a surgical residency program. As a result, some institutions have gone so far as to offer elective courses to help students obtain the established criteria.

Recently, internships within psychological medicine have been re-evaluated in regards to their value in successful training and ability to meet professional demands (Thorp, O’Donohue, & Gregg, 2005). Some institutions have been found to provide increased access to internship experiences in order to meet the needs of the profession. Historically, doctoral training focused on psychological testing with an emphasis on psychotherapy and psychodiagnostic training due to the overwhelming need for mental health services as a result of war and combat. During that time there were few psychologists who were skilled in experiential training but many who practiced. Over time, programs were established where internships were offered and, as a result,
higher education was driven to develop professional schools for training purposes. This later led to the mandate for required internship. Since 1972, the number of clinical internship agencies in the field of psychology has increased from 59 to more than 448 in the year 2002. Doctoral training now considers internship as a capstone that allows for integrative student experiences. In some instances, students have benefited from the opportunity to do clinical work both in and outside of their institution of study. This allowed for students to gain exposure and experience a variety of settings.

Often viewed as a costly venture, the internship can be seen as an invaluable experience in terms of the knowledge gained. As with most other medical programs, there have been issues with lack in uniformity of the internships and variances in outcomes of experience as a result. It has been suggested by some researchers that students who display clinical competency should be allowed to choose whether or not to leave for additional clinical training and to seek out formal internships (Thorp, O’Donohue, & Gregg, 2005). A concept that is not new in nature, however, it is one in which variations has been made in recent years. It has further been suggested that some form of training take place prior to the actual internship in order to integrate research, theory, and practice, therefore aiding in the demonstration of minimum levels of competence. Internships have and will continue to be a viable option for work experience that allows emerging professionals to adapt to the changing times (Thorp, O’Donohue & Gregg, 2005).

Internships can play a vital role in the development of a physician’s communication skills (Gude, et al., 2008). For example, Norway has implemented a mandatory internship in their medical licensure that requires all graduating physicians to complete an 18-month total rotation between a family practice clinic, a medical department, and a surgical department prior to obtaining a license. The sole purpose of this internship is because they believe that it will
improve upon and extend students’ clinical skills and potentially aid in improving communication skills. Overall, it was found that participants in an internship have shown a significant increase in their ability to communicate. Both social and clinical skills improved with social skills being the greater of the two. As a result, the researchers agreed that there needed to be more focus on training of medical students and future physicians in regards to their professional skills. However, the realization and desire for internships in medicine does not always have to start after or even during medical school.

High school students with an interest in medicine have the ability to participate in internship programs such as the Latino & African American High School Internship Program (LA-HIP), thanks to sponsoring programs such as the Sabin Research Institute Children’s Hospital in Los Angeles, California (Cooper, 2012). Programs such as this allow secondary school students to gain hands-on training by conducting experiments under the tutelage of practicing researchers. Here the students get to explore the world of research on childhood diseases through activities in which they study cancer cells, the effects of antibiotics on bacteria, the regeneration of a fish’s heart after an injury, and the investigation of microscopic entities that could be of potential harm to the brains of premature babies. Other programs such as the one at the University of Kansas Medical Center prove to be very competitive in their selection process and rigorous in their training. The program is intended to aid those who are interested in learning about health disparities and research in the medical field. Only four to ten students are accepted per semester. That total number is inclusive of high school, undergraduate, and graduate students all stemming from underrepresented communities or are students who are interested in working with students from underrepresented communities in the metropolitan Kansas City area and rural areas within the state.
Regardless, these internships are all done in an effort to promote education outside the classroom and develop skill sets that may often be underdeveloped. Learning does not have to wait until college and why should it? The earlier students start to learn about what it is that interests them, the greater the chance at them seeking further education in the future and becoming a better-rounded professional. However, there has to be a way to measure the success of internship programs in order to determine the value of the experience that the students are getting in order for internships to continue to secure their place in education.

Although internships can be an indicator of how successful a young professional may be, the type of education that the students receive in the classroom could also be a predicting factor in the student’s success in an internship. Too often are grades in medical school utilized as the major determinant of performance quality (Pearson, Rolfe, & Henry, 1998). In fact, many times these grades are used as a means of ranking the students and placing them in facilities based on these ranks. This suggests that grades are a predicting factor in performance in the workplace, when in all actuality they are only a small piece to the puzzle. There are so many assessments that can be utilized to explore student potential, but it is often difficult for researchers to compare results and make sound judgments. Regardless of this notion, admissions committees for medical schools have begun to take a more critical look at their criteria in terms of previous academic performance and whether or not education outcomes can be predicted as a result (Artino, et al., 2012).

**Traits & dispositions of professionalism.**

Professionalism is one such area of assessment that can be utilized to determine the success of an inexperienced professional, especially an emerging medical professional. It is one that is often found within the heart of clinical practice (Bligh, 2005). Internships and clinical
practice are an opportunity when medical students can learn how to put their knowledge into practice. During this time, they can observe others and reflect on how they can one day utilize this information to help mold and shape their own behavior. The somewhat informal setting of learning through clinical practice/internship provides an invaluable experience that can greatly impact the way in which a young physician practices for years to come. Educators in medicine have considered the need for change in how professional practice is viewed. Courses that focus on professional and personal development are intended to be directive towards addressing this issue. Typically an offspring of previously existing medical ethics courses, the intention of these courses are to encourage an interest in the humanities of medicine.

According to Garman, Evans, Krause, and Anfosii (2006), the Healthcare Leadership Alliance described professionalism as the alignment of personal and organizational conduct with standards that are both ethical and masterly in order to uphold one’s responsibility to the patient, community, service orientation, and commitment to lifelong learning. This concept is one of importance to emerging healthcare professionals looking for mentorship from that of a more seasoned professional. Internships can lead to exposure to how one should not only obtain professionalism but how to maintain it on a regular basis.

Gaining professionalism requires that healthcare leaders master various components, including: understanding professional roles and norms, working with others, managing oneself, and contributing to the field. Understanding professional roles and norms is essentially grasping the concept of how a healthcare professional should conduct himself/herself in practice. One must stay abreast of the latest trends in medicine especially with the constant changes that take place. Working with others requires cultivating healthy relationships amongst colleagues that allow for effective working relationships. Providing and obtaining feedback on performance and
practice, maintaining networks amongst other professionals of similar practice, and participating in professional organizations can help one to stay connected in the medical field. Managing oneself requires the ability to properly manage all resources. By effectively managing time, energy, expertise, and professional standards, one can create a sense of accountability and responsibility. Being proactive can in turn create lifelong success. Contributing, the final component mentioned, essentially refers to finding a way to give back to the profession and to the field of healthcare. Offering to be a mentor to emerging professionals in training and being a part of internship programs is one such way to achieve this component. However, the most effective way for a healthcare leader to achieve a level of mastery in professionalism is to first find out what his/her current level of mastery in the profession is so that he/she may properly be able to share and guide another.

The one thing that we know for sure is that education in medicine has been evolving for centuries (Day, 1942). Though once viewed negatively, internships have made their mark on the world of medicine today and have been recognized as part of what is considered formal education. There is no denying that vocational training and internship presents itself to be a natural process in which the student can explore and expand on their knowledge. In order for internships to continue to exist, there must be continued evidence that shows its worth. Without value, internships (like other aspects of education in the past) may no longer be viewed as a necessity.

**Continuing education.**

Similar to that of many professional areas of study in higher education such as teaching and counseling, healthcare professionals are required to obtain a certain level of continued education that helps them to stay abreast of recent changes and current trends within their
professional field. Often referred to as continuing professional development (CPD) or continued medical education (CME), this extension of education can be costly in terms of both time and money. Although, this too can be viewed as a form of experiential learning, it is one that has become more necessary in order to narrow the gap in healthcare standards and variances in provided patient care (Fletcher, 2007).

Continuing education (CE) in the professional world is a vital component to “ensuring clinical competence and preventing professional obsolescence” (Pitney, 1998, p. 72). It is one that is fueled by society, technology, and an endless amount of information. A common requirement amongst many allied health and medical fields, continuing education typically consists of educational activities designed to improve on professional practice by challenging skills and development of knowledge.

As a means to maintain professional competence, and as set forth by the Board of Certification, athletic trainers were once required to obtain 75 continuing education units every 3 years (Armstrong & Weidner, 2010). Formal learning environments are established by BOC-authorized providers and often are formatted in a lecture style or group activity. It is possible for professional growth to occur outside of these types of settings, even those that require the participants to take a more active role in learning requires certain skills or techniques. Unfortunately this type of informal learning is not always one that a professional can be awarded CE credit for licensure agencies.

Kolb’s theory & medicine.

So, what is it that makes a person choose the professional field of medicine? Is it because they simply want to help others or does it have something to do with their learning style and personality? As mentioned earlier in this literature review, Heffler (2001) argued that in an
optimal environment, all four stages of learning could take place in efforts to resolve a problem and that most individual learners have a tendency to select a preferred style of learning. In order to assess the preferred style of learning for each individual, Kolb created the Learning Style Inventory (LSI) (Kolb & Kolb, 2005). The LSI was designed to determine an individual’s capacity to learn based upon life experiences. By measuring the individuals tendencies to answer based upon the four learning orientations (concrete experience, reflective observation, abstract conceptualization, and active experimentation) the end result would lead them to determining one of the four learning style types: accommodator, assimilator, converger, and diverger (Figure 2). Those with an accommodator learning style are often described as having a dominant learning ability when it comes to concrete experience and active experimentation (Kolb and Kolb, 2005). They typically prefer to learn from mainly “hands-on” experiences. In addition, these individuals commonly have an increased ability to learn in terms of abstract conceptualization and active experimentation categories as a converger. Learners with increased ability in the abstract conceptualization and reflective observation categories are known as assimilators. Convergers typically prefer to “solve problems and make decisions based on finding solutions to questions or problems” (p. 5). Assimilators often concentrate more on ideas and abstract concepts versus people. Lastly, Kolb and Kolb (2005) described those with dominant skills in the concrete experience and reflective observation categories to be known as divergers. Divergers typically excel at viewing concrete situations from multiple viewpoints.

The majority of studies involving medicine and Kolb’s Experiential Learning Theory focus on learning style analysis (Kolb & Kolb, 2005). Various areas such as medical education specialties – residency training, family medicine, continuing medical education, anesthesia education, and surgical training have been explored in relation to Kolb’s Experiential Learning
There has even been research conducted to examine clinical supervision, patient-physician relationships, learning style and student performance on examinations, and the relationship between learning style and medical specialty career choice (Jaarsma, et al., 2009; Gude, et al., 2009; Fletcher, 2007; Green 1954). For all, Kolb’s cycle of learning appears to be a valid and useful model for instructional design in various aspects of medical education. To no surprise, studies in nursing education have found that nursing learning environments have a predominantly concrete learning demand matching that of the nurse’s concrete style of learning. The same could likely be found true for many aspects of medicine.

In some cases it has been found that the experiential learning model has been used as a guide for curriculum development (Kolb & Kolb, 2005). In medicine, anesthesia simulation was designed based on experiential learning for undergraduate medical students. In other instances, studies within the classrooms of medical schools have chosen to investigate performance based on problem-solving abilities. Some schools have developed exercises in which students are grouped together according to their learning styles. Considering these are just a few examples of how an individual’s style of learning and experiences can enhance the educational experience in a professional field such as medicine, what kind of effect could this style of learning possibly have on one of the more specialized areas of medicine such as the field of athletic training?

**Experiential Learning in Athletic Training**

Athletic training, like many other healthcare related fields, is an area of specialization in which experiential learning has played an integral role in the educational experience of the upcoming professional. It can arguably be viewed as being of great value to the success of the professional. Athletic training, still a relatively new field in relation to the history of healthcare, has strived to make its way in the healthcare world as a credible entity. Not unlike many fields
in medicine, the profession of athletic training continues to look for ways to enhance its curriculum and continue to educate its professionals in a manner that not only allows them to keep up with the times but also makes for successful and competent professionals.

**History and background of profession.**

Since the establishment of the National Athletic Trainers’ Association (NATA) in 1950, this organization has standards and criteria by which athletic trainers can be deemed as respected allied healthcare professionals (Weidner & Henning, 2002). Due to the tireless efforts of this organization, committees have been established over time that allow for the further enhancement of the athletic training profession. In 1968, a committee entitled the NATA’s Professional Advancement Committee developed criteria by which all athletic trainers could be tested and measured to determine whether or not they were knowledgeable enough in the field to gain professional certification. In 1969, it was decided that all active members of the NATA would be required to sit for the certification examination with the exception of those who fell under the ‘grandfather clause’ due to extensive experience prior to this mandate (Grace, 1999). In the 1970s, the NATA Professional Education Committee was developed and from this committee came a formalized list of athletic training student learning outcomes in which all curricula would be required to offer. In addition to this coursework, students would also be required to obtain a specified amount of clinical hours along with skill-competencies upon which they would later be evaluated. Later in the 1970s, the Board of Certification was established in order to meet state and federal regulations regarding licensure and certification. From there, the NATA Board of Certification (NATABOC) conducted a study in 1982 that would later be identified as the first role delineation study. In 1983, the Professional Educational Committee developed competencies in athletic training that sprang from the previously conducted role delineation
study. These competencies would then serve as guidelines for athletic training education programs.

Historically, there were two routes offered by the NATABOC to obtain certification; one in which a rigorous curriculum of coursework was required. Another, in which a more “hands-on” approach was taken, required only the essentials in regards to coursework. From the time of the first certification exam up until the early 2000s, requirements for the NATABOC certification exam consisted of either the successful completion of 600-800 clinical-experience hours within a curriculum program or 1800 clinical-experience hours served as an apprenticeship student. These requirements later evolved to 1500 clinical-experience hours as an internship student. In addition to these requirements, additional hours of experience with contact and collision sports were required. At one time the early requirements for athletic training certification were deemed as less structured in didactic instruction but more steeped in clinical experience when compared to that of the students who were involved in clinical education in medical school (Weidner & Henning, 2002).

Starkey (1997) claimed that in less than 50 years, the profession of athletic training has evolved whereas the educational methods have not. With that noted, the NATA’s Board of Directors worked to establish the Education Task Force. This group compiled 18 recommendations aimed at improving and standardizing all areas of education, including: entry-level, graduate, and continuing education of athletic trainers. Starkey further proposed the argument that athletic trainers are the original multi-skilled healthcare providers, whereas none of the skill set utilized by athletic trainers is unique to the profession. In order to continue to be competitive, it is believed that the athletic training educational model must adapt to the expectations of the healthcare community and the various settings in which one can be
employed. Future years of advancement lend ways to defining a student’s skill base, strengths and weakness, determining what make some to be considered entry-level, and emphasizing the “student” and “instructor” relationship (p. 114).

Research on athletic training education programs has previously directed its focus on assessing and improving academic quality in the educational process of athletic trainers (Neibert, 2009). As in many other allied healthcare professions, clinical education provided by athletic training education programs debatably plays an important role in overall student learning (Weidner & Henning, 2005). Weidner and Henning (2005) suggested that excellent clinical skills are important for an athletic trainer and that education should be carefully designed to prepare students to be sensitive and proficient practitioners for physically active individuals. Proper type and amount of clinical supervision is key to the student’s ability to obtain the desired level of clinical education. So, why do some prefer athletic training as their healthcare profession of choice? There are uncertainties surrounding the factors that influence individuals to choose athletic training over other health-related professions (Mensch & Mitchell, 2008). A clear understanding as to why someone chooses this profession can play an important role in understanding a student’s learning style and ability to succeed. Gardiner-Shires and Mensch (2009) reported that there are two important components of an individual’s decision to choose a career in athletic training, these being attractors and facilitators. By understanding what attracts an individual to become an athletic trainer, the researcher can determine how to channel efforts towards facilitation in student recruitment and what adjustments to make within the classroom to allow for more efficient learning from the student. In turn, this will allow for overall enhancement of the education of future athletic training professionals.
Learning styles and Kolb’s theory.

Athletic training students (ATSs) of today are typically required to learn actively, in regards to clinical education, while engaged in real-life scenarios in which clinicians and patients come into connection with one another. By engaging in their learning, ATSs can develop didactic and clinical learning skills that are comparable to that of students within other healthcare profession programs. According to Ristori, Eberman, Tripp, and Kaminski (2011), “learning may improve when the preferred learning style of an ATS is matched to the teaching style of an Approved Clinical Instructor (ACI)” (p. 33). Here, the researchers chose to explore the concept of how variance in learning styles amongst ATSs can affect the outcome of their learning ability. As a result, findings showed that diverging learning style is common among ATSs in the clinical setting. These findings were contradictory to those of previous studies analyzing clinical and didactic settings. Although this study found that ACIs are able to identify the learning styles of ATSs, it suggests that this ability may have little overall impact on the ACI-ATS relationship. Furthermore, it is suggested that one of the most helpful characteristics found was professional behavior of the ACIs and their ability to serve as effective mentors to the ATSs. The researchers recommended ACI willingness to alter instructional methods to accommodate learning style as an area for further investigation.

On the other hand, Brower, Stemmans, Ingersoll, and Langley (2001), argued that the learning style and the level of effectiveness of the student’s experience could affect a student’s ability to rise to the challenge of their studies. By looking at whether or not a specific learning style could be linked to admission into athletic training education programs for athletic training students, the researchers found that there were no differences between expected and observed
subject learning style distribution of those admitted and not admitted into the selected athletic training programs.

Still, there are other researchers, such as Armstrong, Weidner, and Walker (2009), who argued that a critical aspect of learning style lies within the real-time opportunities in which athletic training students are provided and by which their clinical proficiencies are evaluated. With clinical skill proficiency serving as a major component of athletic training education, the researchers believe that identifying methods of evaluation used by the ACIs will aid in the development of better strategies to be utilized by Athletic Training Education Programs (ATEPS) in the future.

It is important for educators to remember that different students have different learning styles. Therefore, if they adopt only one method of teaching then they will likely not reach the needs of all students. Kolb’s Experiential Learning Theory (ELT) and Learning Style Inventory (LSI) can be used to assess the varying needs of students and how to best accommodate different styles of learning. Stradley, et al. (2002), discovered that one’s teaching style is similar to that of his or her own personal learning style. In order to properly reach all types of students, it is vital that they incorporate teaching methods that are appropriate regardless of the instructors’ dominant type of learning.

Athletic training students are diverse and so are their learning styles. Stradley, et al. (2002), found there to be no predominant learning-style type that could characterize “typical” athletic training students. With this in mind, athletic training education program (ATEP) educators must remember to address the needs of a wide array of students in a manner that helps them to succeed both in the classroom and the clinical setting. Research has found that based on the Kolb LSI, athletic training students’ learning style types are relatively equal in distribution.
amongst the four defined categories of accommodators, assimilators, convergers, and divergers (Stradley, et al., 2002). However, as discovered by Coker (as cited in Stradley, et al., 2002) there are noted differences in students learning styles in the classroom versus that found in the clinical setting. In order to optimize the students’ learning experience it is important to address these differences.

Research by Mazarolle, Bowman, and Benes (2014) argued, “clinical education is the foundations of athletic training programs, as it provides athletic training students the opportunity to gain the necessary skills to succeed as an entry-level professional.” Findings made by these researchers were found to be most relative to the topic of research for this particular study. It was here that the researchers noted that “athletic training students value the time spent in clinical education” and that clinical education “needs to be engaging.” The results of this study found the most effective means of doing so would be to provide sufficient opportunities to implement clinical skills and decisions, incorporate a means of communication that is more frequent amongst the preceptor and the student, and to obtain feedback that solidifies the professional development of the student. However, it was suggested by the researchers that the results of this study were only based on the perceptions of the students and did not include that of their preceptors from which they learned. To gain a more thorough understanding, it would be pertinent to consider all parties involved.

Clinical education.

Based on the Competencies set forth by the NATA, ATEPs are required to offer a minimum of set criteria within the curricula that will allow for students to gain the knowledge base needed to become a certified athletic trainer or ATC (National Athletic Trainers’ Association, 2011). It is strongly encouraged that ATEPs strive to exceed these minimum
requirements by extending course content and varying clinical experiences that will afford the student with an education that is of the highest quality. As part of the clinical education experience, ATEPs are required to evaluate students based on their ability to perform the recommended Clinical Integrated Proficiencies (CIPs). Evaluation of CIPs allows the student the opportunity to demonstrate both decision-making and skill integration ability. By gaining clinical experience throughout the course of the curriculum, students are allowed multiple opportunities to apply the skills that they have acquired in real-life scenarios.

Berry, Miller, and Berry (2004) revealed that active learning time (ALT), or time spent engaged in activity, positively effects learning outcomes of the student. However, this is a factor that is often found to be difficult to measure. These researchers believed that the only way to determine how time is being managed and what opportunities are afforded, in regards to practicing clinical proficiencies, would be to provide a breakdown of how the student’s actual time is being utilized. Findings within this study showed that utilizing the Athletic Training-Clinical Education Time Framework (AT-CETF) allows for determination of a more clear understanding of how students utilize their time within the clinical field experience. This study also implied that large-scale observational studies were more favorable and accurate in measuring clinical field experience time, lending credence to the need for more qualitative research about ATEPs.

Other researchers, such as Rich (2009), argued that it is imperative for clinical instructors (CIs) to be able to recognize what are considered to be “teachable moments” within the clinical education setting. By becoming more aware of topics that are being covered in the classroom, CIs are likely to be able to effectively recognize the “teachable moments” that would build on the ATSs’ theoretical knowledge. Findings of this study suggested that there was no difference
shown between athletic training education program characteristics and the opportunities for and barriers to real-time evaluations among the various clinical experience settings. In addition, Rich (2009) suggested that in order to determine athletic training students’ clinical proficiency for entry-level employment, ATEPs must incorporate standardized patients or take a disciplined approach to using simulation for instruction and evaluation.

In order for an athletic training student to obtain the appropriate clinical education needed, ATEPs must provide the proper type and amount of clinical supervision according to the requirements made by the BOC. It has been found that the supervision of a student by an approved clinical instructor (ACI) can positively or negatively affect their professional growth and development. Weidner, Noble and Pipkin (2006), examined the extent which athletic training students (ATSs) are utilized other than as medical care providers by assessing the perceptions of the type and amount of clinical supervision that ATSs received during college/university clinical education experiences. Findings of this study showed that direct supervision of ATSs while involved in team workouts, competitions, and athletic training room activities declined as the ATSs progressed in academic level. This leads to the belief that not only are ATSs not getting the proper amount of supervision, but also that supervision standards are likely to vary according to the respective setting in which their clinical education experience is performed. This variance in quality, presents itself as a potential weakness in the curriculum standards that will need to be corrected over time to allow for more equal opportunity for ATSs to obtain the education and experience needed to make them effective clinicians.

In terms of clinical education (CE) in healthcare profession programs, one might argue that it is unique to higher education in regards to the amount of time required and spent in contact hours obtained outside of the classroom (McCallum, Mosher, Jacobson, Gallivan, &
Guiffre, 2013). The ideal clinical experience should be one that immerses the student in actual hands-on learning that one cannot always achieve in the classroom alone. Clinical education experiences in athletic training educational programs is not unlike many other healthcare professions in that its main objective is to aid in the development, attainment, and mastery of certain required clinical proficiencies and practices. It has been argued that “physical therapy education programs (PTEPs) devote 44.9% of professional (entry-level) physical therapist education curricula to CE” (p. 1299), whereas at one time ATEPs perceived spending approximately 53% of professional (entry-level) athletic training education in clinical education (Weidner & Henning, 2002).

Like ATEPs, physical therapy education programs (PTEPs) utilize clinical education that is typically managed by a director of the clinical education component of the curriculum, whereas many experiences in which a student can learn lay outside of the classroom in varying internship type settings. These clinical directors or coordinators strive to provide opportunities to engage the students in the management and care of patients in various healthcare situations and settings. It is possible that both types of students can be exposed to information beyond management and care to another level that encompasses administrative duties and the responsibilities associated with the business aspect of each profession. In comparison, both ATEPs and PTEPS follow a set of guidelines established by their Board of Certification and accrediting bodies that “demand demonstration of quality and continuous improvement” (McCallum, et al., 2013, p. 1299).

**Perceptions and assessment of quality.**

In order to determine whether or not an athletic training student is receiving a quality education that prepares them to be a successful certified athletic trainer (ATC), determining what
qualities are needed to become a successful athletic trainer must first be explored. Until recently, there had been no formal research that sought to establish characteristics that could be used to define what makes for a desirable athletic training professional. Research by Raab, Wolfe, Gould, and Piland (2011), provided some insight towards the characteristics that define a quality athletic trainer. It was argued that being an effective athletic trainer entails more than clinical practice alone. Although the BOC regulates requirements for education in regards to curriculum and continuing education, there are no specific guidelines provided to aid the ATS in acquiring personal intrinsic attributes and dispositions that may allow them to be considered as a more effective ATC. As a result of this study, it was discovered that a quality ATC could be defined as possessing five main characteristics: care, communication, commitment, integrity, and knowledge. By possessing these characteristics, a quality ATC can effectively communicate and care for the student athlete, patient, or client in a way that is viewed as professional and trustworthy.

Affording the ATS the opportunity to succeed within the curriculum program is another attribute that will lead to their ability to become a successful clinician. With this in mind, it is often a challenge to determine what makes for quality educational opportunities. Although some ATEPs gather data through curricular satisfaction evaluations completed by the students, the results are not typically published in a manner that would allow researchers to expand upon in their world. Research in this area is vital to the improvement of quality and overall satisfaction of the students and professionals participating within the ATEPs.

Some researchers have sought to gain understanding in this area based on the perceptions of the ATCs who recently graduated and are currently employed in the profession (Henry, Van Lunen, Udermann, & Onate, 2009; Neibert, 2009; Seegmiller, 2006). Other researchers seek to
develop standards, criteria, and assessments that will effectively measure quality of both the clinical instructors and the curriculums (Barnum, 2008; Miller & Berry, 2002; Weidner & Henning, 2004). Regardless of the method chosen or the targeted population for study, it is evident that finding ways to assess quality can take on many shapes and forms in research.

**Conclusion**

In a field such as athletic training, it is important to help link individuals to the profession who are able to appropriately meet the requirements of the job. Sims (1983) argued “if an organization were to decide to fill its positions by matching the characteristics of a person and the requirements of a job, organizational effectiveness should increase as a result of greater personal satisfaction and improved job performance” (p. 501). He further argued that learning, adaptation, and problem solving processes are similar and that all jobs involve each of these processes. The interaction a person has with the environment affects their ability to learn. Similarly, changes that one undergoes can in turn affect the form of that environment (Figure 3).

Sims argued that a match between the person and the job makes a difference. This could include skill level, ability to learn, and how professionals interact in what he refers to as the growth climate. A person’s potential to succeed can directly correlate with his/her perception of autonomy, relationships with supervisors, the chance to grow and develop, and advancement potential within the workplace.

Although there has been significant research in athletic training education in regards to learning styles, clinical education, and the perceptions and assessment of quality, there has been limited qualitative research on the value of internship style learning on the successful career preparation of athletic training education students. By gaining a better understanding of Kolb’s Experiential Learning Theory (ELT), experiential learning in higher education, experiential
learning in healthcare, and experiential in athletic training, a more clear connection is made regarding the relationship between integrative work experience and athletic training curriculum. The broad research that has been done in regards to both internship and the field of medicine may create a foundation in which future researchers seek out a more clear understanding of how ATEPs prepare the ATS for a career as a certified athletic trainer, the ways this can be improved upon, and how to ultimately help create better professionals overall.

ATSs are often found to be more successful when exposed to an environment that stimulates interest and includes a vast array of knowledge and experience. Early understanding of student learning styles can lead to more successful experiences within the ATEP curricula. A successful experience as an ATS can lead to increased student retention in ATEPs. An increase in student retention can lead to an increase in the number of ATEPs that are available for work in the field. The availability of ATEPS is directly correlated with the demand for athletic trainers in society. Athletic trainers serving as experienced and successful practitioners aid in proving the validity of the athletic training profession. Therefore, in order to better understand the effects of ATEPSs on career preparedness and the perceptions of the students within these programs, each of these aspects must be taken into consideration.

Not only will a better understanding of learning styles, clinical education, and the perceptions and assessment of quality allow for improvements to be made within the curriculum for ATEPs, but also for adjustments to be made by the approved clinical instructors (ACIs) within their methods of teaching to allow for more successful outcomes of learning within the classroom and clinical experience. Thus, with this understanding, athletic training educators can continue to improve upon efforts to provide a well-rounded and diverse educational opportunity for the students of athletic training.
**Figure 1.** Kolb’s Experiential Learning Cycle

![Kolb's Experiential Learning Cycle Diagram](image)

Figure 2. Kolb’s Learning Style Categories as Compared to Modes of Learning

<table>
<thead>
<tr>
<th>Learning Style Type (with learner characteristics)</th>
<th>Accommodator (hands-on)</th>
<th>Assimilator (prefers ideas)</th>
<th>Converger (problem solver)</th>
<th>Diverger (multiple viewpoints; uses senses and feelings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete experience (feeling)</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Reflective observation (watching)</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Abstract conceptualization (thinking)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Active experimentation (doing)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

CHAPTER III

METHODOLOGY

This qualitative case study investigated the opinions of ATEP directors, clinical coordinators, and faculty instructors to gain their insights on the role that internships play in the preparation of athletic training students for a career in athletic training. Qualitative case studies are intended as a method of inquiry in which the researcher deeply explores a “program, event, activity, process, or one or more individuals” (Creswell, 2009, p. 13). In this case, the views of ATEP directors, clinical coordinators, and faculty members were examined through one-on-one interviews. Interviews were semi-structured, with open-ended questions. Additional questions were asked based on the information shared by the interviewees and the direction in which the dialogue took shape (Gall, Gall, & Borg, 2007). In addition, document analysis was performed through the utilization of web resources and public record pieces obtained from the institutions where the research was conducted. As a certified athletic trainer engaged in professional practice at a NCAA member institution, I completed daily journal entries on my data collection experiences in order to provide transparent reflexivity and triangulation of data analysis.

Research Questions

The primary question for this study was how valuable is the internship/clinical education experience in an ATEP student’s preparation for a career as a certified athletic trainer (ATC)? Some secondary questions included but were not limited to:

1. How have the changes made within the Athletic Training curriculum, in response to program accreditation, affected ATEPs and students?
2. What differences, if any, are there amongst programs and what the students are learning?

3. What specific components of the internship make it a valuable experience for the student?

4. What are problematic areas or limitations within the internships?

5. What practices have emerged to better educate students through internship experiences?

6. What formal and informal learning experiences within the curriculum help the ATEP student to better prepare for the job?

**Approach and Rationale for Using Qualitative Methods**

According to Creswell (2009), qualitative research is scholarly inquiry that employs various strategies and philosophical assumptions, methods of data collection, analysis, and interpretation. Through various measures and tools, qualitative research may utilize observations, interviews, and document analyses to define and describe moments in an individual’s life and their experiences. With this in mind, researchers explore these moments through diverse perspectives, philosophical stances, and systematic procedural guidelines (Denzin & Lincoln, 2000). Moreover, qualitative research seeks to remain front and center in regards to this particular evolving model of inquiry.

This study utilized a qualitative methodology to allow for the ATEP directors, clinical coordinators, and faculty instructors to shed light on internships and their role in the athletic training education learning experience. Qualitative research has been found to be useful in this sense by allowing the researcher to “investigate topics in their complexity, in context” (Bogdan & Biklen, 2007, p. 2). Qualitative research is used to “understand some social phenomenon from
the perspective of those involved, to contextualize issues in their particular socio-cultural-political milieu, and sometimes to transform or change social conditions” (Glesne, 2006, p.4).

**Research Design**

Given the research objective of this study, an appropriate qualitative approach to explore the shared experiences of ATEP directors, clinical coordinators, and faculty was found through case study. This research examined in rich detail, the perceptions and experiences of ATEP directors, clinical coordinators, and faculty instructors in providing clinical experiences to gain deeper understanding of the phenomenon of internships in athletic training programs. Qualitative data has been known to produce thick descriptions as a result of in depth inquiry through interviews that capture more of a personal perspective or experience from individuals (Patton, 2002).

Case studies have been utilized to expand knowledge of “individual, group, organizational, social, political, and related phenomena” (Yin, 2003, p. 2). Yin (2003) found that case studies are effective beyond just a preliminary research strategy and can be used to explore, describe, and explain. This notion is found to be similar to that of experimental designs in which there may be exploratory, descriptive, and/or explanatory experiments. The key is determining which strategy is best suited to accomplish the goal of the research. With that understood, Yin (2003) identified three conditions that are pertinent to strategy selection. These three conditions include (a) types of research questions, (b) extent of control over behavior, and (c) degree of focus on contemporary versus historical events. Understanding the “how” or “why” questions are favorable to case studies and reflective of the researcher’s overall main question or topic of inquiry. In terms of the extent of control over behavior, the case study is often preferred in examining contemporary events. Although it utilizes many of the same techniques as historical
strategy, case study adds to the overall stock of the research by including direct observation and interviews of persons who were actually involved in the events.

**Collective case study.**

According to Stake (1995), Denzin, and Lincoln (2005), there are three types of case studies. The three types include (a) intrinsic, (b) instrumental, and (c) collective. An intrinsic case study is one in which the researcher seeks to gain a better understanding of the case through exploration of a particular topic. By studying the uniqueness of the case, the researcher gains an overall understanding of a particular person, place, or event in order to provide insight to a specific issue, as opposed to more of a generic phenomenon. An instrumental case study lends way for the case to be secondary to what the researcher is attempting to truly understand. The case, although still looked at in depth regardless of its role, is decided upon based on gaining understanding of a separate issue. A collective case study, an instrumental study including several cases, is one in which the researcher analyzes multiple cases in order to investigate a phenomenon, population, or general condition. The cases, either similar or dissimilar, are selected based on the researchers belief that studying those particular cases will provide a better understanding of a more sizeable collection of cases.

This particular qualitative study was a collective case study. Not only were multiple institutions involved but multiple people from each institution were selected as well. Each was considered to be a separate case in understanding the phenomenon of internships within athletic training education curricula. By interviewing an array of individuals who served in different capacities, the researcher was able to gain a more exhaustive understanding of the overall phenomenon. The researcher collect rich, thick descriptions through the utilization of open-ended, semi-structured, one-on-one interviews in order to understand the overall complex
phenomenon of internships. Furthermore, the public documents (found on the internet) describing ATEPs were utilized to provide a better understanding of the nature of the programs and serve to triangulate interview data.

**Role and Responsibility of the Researcher**

In qualitative research, the researcher is often denoted as the key instrument (Bogdan & Biklen, 2007). With this in mind, the outcome of the research weighs heavily on the skills, ability, and training of the researcher (Patton, 2002). According to Patton (2002), trustworthiness and authenticity are traits commonly characteristic of a qualified qualitative researcher.

For the purpose of a qualitative study, it is important for the research to maintain what Patton labels as “neutrality” (2002, p. 51). Ideally, this is accomplished by remaining neither sympathetic nor unsympathetic in an attempt to maintain balance (Weiss, 1994). A focus on maintaining neutrality within this study will allow for a natural flow of information that is neither preconceived nor opinionated.

This research study provided a “voice” to a group of individuals that play a key role in the educational experience and curriculum development of ATEP students. According to Bogdan and Biklen (2007), “giving a voice” to the subject allows for a more clear understanding of a group that is often left unheard. By allowing the educators an opportunity to define their view on the value of internships within the athletic training curriculum, the impact could potentially be greater in its effects towards future curriculum development.

**Professional position.**

Working in the capacity of a certified athletic trainer for more than a decade has not only afforded me the opportunity to see the field of practice evolve but it has brought about an
awareness of the profession that an outsider may fail to see. There is more to the field than meets the eye and the evolution of curricula in athletic training has made way for professionals in the field of athletic training to be viewed as more confident and capable healthcare providers over time. My involvement not only in my daily position as a Senior Athletic Trainer at the University of Mississippi, but also on a more extensive level as the former secretary of the Mississippi Athletic Trainers’ Association, has helped to feed my interest in the growth and development of the profession.

Changes in the curriculum have lead to new developments in how programs are guiding students through the process of their professional education in the field of athletic training. A once intensive internship/hands-on style curricula, athletic training shifted to focus on a more detailed classroom emphasis of core curricula. Having witnessed these changes over the years and having completed the internship route myself, I have a strong desire to better understand how these changes have effected the preparation of athletic training students for future careers in the profession. This interest has fueled my pursuit of my doctorate degree in Higher Education. My interest in this area, desire to contribute to the betterment of the profession, and hopes to one day be able to play a larger role in the academic aspect of the profession are what drove my desire to conduct this study.

Although my role as the researcher was to serve as the instrument, I realized that my level of involvement was fundamental to the paradigm of the study in terms of my relationship to the participants. As brief as one-on-one, in-depth interviews may appear to be, I was still required to enter the lives of the participants and establish a personal relationship with them throughout the research process. Not only was it important for me to acknowledge my role early on but also it was equally important for me to realize that mistakes could occur, as well as
personal biases that could potentially affect the overall outcome of the study (Merriam, 1998). In attempts to keep bias and mistakes from occurring, I intentionally created interview questions that were piloted and reviewed by a peer debriefer. It was my intention to not allow my own opinions, feelings, values, and beliefs to be made known throughout this process. Patton stressed the importance of continual planning and thinking in regards to the researcher’s role in conducting qualitative research (Marshall & Rossman, 1999). One thing mentioned is the degree of participantness as the researcher and maintaining a level of empathetic neutrality (Marshall & Rossman, 1999, Patton, 2002). These concepts refer to the careful approach taken by the researcher to not be too close nor too far from the study in a way that would allow for difficulty in understanding what is truly happening or that lead to a clouding of judgment. As the researcher, my goal was to collect information true to its context, accurately convey all findings whether positive or negative, and obtain multiple perspectives (Patton, 2002). Furthermore, acting as the instrument, it was necessary for my role as the researcher to identify and disclose all assumptions and biases that I had prior to the start of my research.

**Researcher Bias and Assumptions**

In order to prevent researcher bias and prejudice, the researcher must continuously revisit his/her own opinions in order to prevent influential thinking that may affect the outcome of the data (Bogdan & Biklen, 2007). It is believed that through conscious recognition of personal views, the researcher may not completely eliminate these effects but can often minimize their impact.

Having graduated from what was then known as an “internship route” program in athletic training, I felt strongly about the value of this style of learning. I believed the hands-on experience that could be gained through an internship focused program similar to the one I
completed, could be exemplary when compared to limitations and restrictions common within ATEP programs. I believed that, in efforts to improve the curriculum and make the profession appear to be more credible and noteworthy, the profession replaced the component of education that made athletic trainers proficient in clinical skills with practitioners that were unprepared to manage situations they faced in professional practice.

Recent experiences in supervising graduate assistant athletic trainers and in working with peers too, lead me to believe that they lack the ability to manage time well, have difficulty with decision making, lack needed communication skills, and often struggle when faced with adversity. With limited hours available in a clinical setting, the ability to handle and deal with the long hours and stresses of the profession was what I believed to be inadequately developed. In addition, I also believed that these young professionals were guided yet sheltered as students in a way that hinders their ability to gain experience in areas such as decision-making and communication. Working under the close supervision of a certified athletic trainer (who is ultimately responsible for the care of the student-athletes) greatly reduces the opportunity for making final decisions in regards to injuries and having to communicate with the coaches, parents, and even the student-athletes involved. The result of these experiences is often a “shell-shocked” graduate student who is not only being asked to maintain good grades and work the hours of a full-time staff athletic trainer, but also be able to manage everything in a way that is similar to that of a seasoned professional. Having once been in their position myself, I found it hard to fathom that they were struggling so much when I went through the same trials and tribulations that they were now faced with. Although I realized that times have changed and the curriculum has changed, I felt as thought there had to be a happy medium somewhere that would allow these students to experience the best of both the classroom and the clinical experience.
Awareness and acknowledgment of bias are important factors in accurate research and the impact that they can have on the investigation process (Merriam, 1998). With this in mind, I understood the importance of becoming familiar with my own personal bias as well as realizing that the participants might also have biases about which I should be aware. For this reason, I attempted to make participants feel as comfortable with the interview process as possible without disclosing too much personal information of my own that may interfere in this area. Furthermore, I conducted a self-check. I asked follow-up questions of the participants regarding responses, when necessary, in order to accurately capture their intended meaning and to minimize the need for later interpretation by the participant. I also relied on the help of my selected peer debriefer and faculty advisor in aiding with limiting the effects of bias.

**Piloting the Interview**

After gaining permission to conduct this study from my dissertation committee and achieving proper IRB approval from the University of Mississippi (Appendix A), I contacted each of the individual research sites and completed any and all necessary paperwork that was required. This included any needed IRB approvals and permission required from each of the participating institutions prior to the start of my research.

I initially planned to pilot all interview questions with the help of colleagues at Troy University. Since this institution had an ATEP and was known for requiring students to participate in internship experiences in the past, I felt as though it would be ideal for this study. Another reason that I chose this institution was because of my previous experiences having worked with the ATEP director in guiding undergraduate students through internship experiences at the University of Mississippi. I felt as though this person would be willing to assist me not only in her own interview but also in providing me with suggestions of contacts
that serve in other capacities such as clinical coordinator and faculty instructors. However, much
to my dismay, the ATEP director at Troy University resigned at the year and took a position at
another institution that I planned to utilize in this study. Therefore, I was left with the decision
of who to utilize in place of this person. After careful consideration, I decided to interview a
member from Delta State University ATEP. Although their program lost its accreditation last
year, I felt as though this individual would serve well in this role and I was able to successfully
complete my pilot study.

As suggested by Gall, Gall, & Borg (2007), piloting the interview questions allowed me
to be able to produce reasonably unbiased data. With this in mind, I audiotaped the interviews
for review. The participant of the pilot study was asked to provide me with feedback on
questions that were given (Creswell, 2008). Although this data was not used in the overall
findings of the study, it helped to provide me with the opportunity to make needed adjustments,
to test out the chosen technique of data collection, and to ensure that the questions I selected
clearly reflected what I intended to ask and wanted to know (Yin, 2003). From there, I found
that I did not need to replace or modify any questions but rather rearranged the order in which I
asked some of the questions. None of the questions were deemed ineffective or seemed to allow
for other issues to arise that caused the participant to get off topic (Stake, 1995). I used feedback
from the participant as well as my own observations and was able to make the needed
adjustments to the interview questions successfully.

Site Selection

Multiple sites were considered for this research study. Each of these institutions
was selected based on their presence of an ATEP and individuals that served in all three
capacities of positions for my intended inquiry. The institutions selected have ATEPs that have
been in place for at least 5 to 10 years. The participants in this study consisted of ATEP directors, clinical coordinators, and faculty instructors from various institutions located within the southern region of the United States and were a combination of experienced and new faculty. The potential sites for research that I originally proposed for this study were: Louisiana State University, The University of Southern Mississippi, The University of Alabama, The University of Georgia, The University of Arkansas, The University of Florida, Texas A & M, Western Carolina University, and the University of West Alabama. The institutions sites that were included in this study were derived from this original pool of potential sites.

Creswell (2008) defined a gatekeeper as an “individual who has an official or unofficial role at the site, provide entrance to a site, helps researchers locate people, and assists in the identification of places to study” (p. 219). For this study, the ATEP director of each institution represented the gatekeeper. As the researcher, I first contacted the ATEP director of each of the aforementioned institutions to seek approval of their participation in this study. Contact was first made via email to set up a time to discuss the research project and its components by telephone conversation (Appendix B). From there I confirmed contact information for clinical coordinators and faculty instructors with the ATEP directors based on my findings from their respective ATEP websites. These individuals were then contacted similarly and sought out for their participation in this study (Appendix C). Due to the location of these institutions, the financial obligation that would come with traveling to each site, and convenience, I chose to conduct all research through the use of telephone interviews that were recorded. Since recurrent trends were found to be present within the text of these interviews and saturation (i.e. repetition of data; no new themes were identified within the data; thick and rich detail; Walker, 2012) was reached, I did not continue to seek out individuals outside of those that participated in this study.
Population, Sample, and Participants

Population.

A population, as defined by Creswell (2008), is “a group of individuals who comprise the same characteristics” (p. 151). The population selected for this qualitative study consisted of faculty members who served in the roles of program director, clinical coordinator, and faculty instructors within the ATEPs at the aforementioned institutions. In addition, these participants served as active and certified athletic training professionals.

Sample.

A sample, as defined by Creswell (2008), is “a subgroup of the target population that the researcher plans to study for the purpose of making generalizations about the target population” (p. 152). The sample within this study was one that was considered to be purposeful. Purposeful sampling means, “the researcher intentionally selects individuals and sites to learn or understand the central phenomenon” (p. 214). As suggested by Creswell (2008), my intent was to select participants and sites that would be “information rich.” For this reason, I chose to be particular in the selection of participants (Merriam, 1998). The purposeful sample for this study consisted of ATEP directors, clinical coordinators, and faculty instructors at institutions in which I believed their curriculum to have required and/or encouraged their students to participate in internship experiences. These institutions had a history of sponsoring internship within their curricula for more than 3 to 5 years. I had knowledge of the history of internship involvement of these programs based on my professional experience in dealing with staff members and/or certified athletic trainers who were employed by these institutions at the time of this study or that were previously employed by these institutions. All participants chosen displayed some level of student involvement in internship experiences and were selected based on their likelihood to give
adequate responses regarding this concept (Merriam, 1998). It was my belief that these individuals would help me to further understand the central phenomenon based on their past experiences and level of involvement in this area.

Participants.

Once approval was sought from the IRB and the ATEP directors at each institution, I worked to contact other remaining potential participants (i.e. clinical coordinators and faculty) regarding their involvement in the study. This was done with the assistance of each institutions website and any suggestions that were made by the ATEP directors at their respective institutions. Based on some challenges faced in making contact with multiple participants, I utilized both phone calls and emails to reach them. Once contact was made with each of the participants, a follow-up confirmation email (Appendix D) was sent to the participants that included an information and release form (Appendix E) and consent for words release (Appendix F).

Data Collection

Creswell (2008) suggested that qualitative data collection consists of “collecting data using forms with general, emerging questions to permit the participant to generate responses” (p. 213). Similarly, Yin (2003) suggested that methods for qualitative research that consists of case studies might include: “documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts” (p. 85). Though one single source has no advantage over the other, Yin highly recommends utilizing multiple sources of evidence, as they are highly complementary of one another.

In order to add depth to the literature in this study, a collective case study design was used to gather data via interviews, documents, archival records and/or audio-visual materials
when available. Although each of these methods had varying strengths and weaknesses, including all three assisted with triangulation and increased the overall validity of the study. By including different data sources, I afforded myself the opportunity to cross check findings (Patton, 2002).

**Interviews.**

In qualitative research, interviews are best approached by the researcher who asks open-ended questions allowing for participants to respond in a way that is uninhibited by the researcher (Creswell, 2008). These interviews allowed for the opportunity to obtain useful information in the absences of direct observation of the participants. Furthermore, interviews allowed for opportunities in which the participants provided detailed personal information. This afforded me the ability to better control the type of information received because I was able to ask specific questions to elicit intended information.

Prior to the start of the interview process, as previously mentioned, an email was sent with an information sheet and consent form (Appendix E) and a written consent for word use (Appendix F) with each of the participants. These forms were intended to notify the participants of their rights and serve as an indication of their agreement to participate within the study as well as their right to disengage from participation without penalty (Creswell, 2008). The participants were asked to return the signed forms to me prior to the start of the interviews. At the time of the interview, an interview protocol (Appendix G) was conducted with each participant that included a brief overview of the interview process, a notification of return receipt of the signed consent forms that were previously sent via email, as well as the opportunity to ask any further questions regarding the study. If any questions were asked, participants were provided responses accordingly. If no questions were asked, the interview process was initiated. I then proceeded to
the data collection process utilizing a semi-structured interview that I developed. Interviews required approximately 60-minutes of each participant’s time and were scheduled at times that were most convenient for both the interviewee and the researcher. This timeframe served as an overall average for total time allotted per interview with the understanding that the time varied in amounts of lesser or greater value. I conducted phone interviews for the entire process. I established a pre-determined list of questions (Appendix H) for the participants that were utilized for all participants regardless of whether they were identified as an ATEP director, clinical coordinator, or faculty instructor.

These interviews were digitally recorded and kept on a computer in a secure place until the study was complete. In addition, I made summaries and/or field notes during the process of the interviews to help bring clarification to any points of question or confusion noted during the time of the interview. Though researchers such as Merriam (1998) found it best to transcribe their own interviews in order to become familiar with the information, I contracted an outside transcriptionist to transcribe these interviews verbatim for the sake of time efficiency. This person was made aware of the need to maintain confidentiality and privacy of participants. I then allowed for time to replay the interviews while reading each transcript simultaneously to familiarize myself more with the information. Each narrative was reviewed and checked for accuracy. This allowed me the opportunity to find and correct any and all errors that were made. Participants were assigned false names to allow for their identities to remain unknown. Themes were then extracted from these interviews and integrated into a narrative format.

**Document analysis.**

Through the use of document analysis, I familiarized myself with each institution’s ATEP and its associated faculty. Document analysis has been found to provide insight that is
often unobtainable via interview or observation (Patton, 2002). This method allowed me to gather more concrete information on each institution and gain a better understanding of the perspective of the interviewee that was obtained. I acquired information regarding the details of each ATEP including but not limited to (a) admissions requirements, (b) program size, (c) presence of internship experience, (d) curriculum requirements, (e) faculty size, (f) experience of faculty, and (g) history of overall success rate based on percentage of first-time pass rate of the BOC exam.

Archival records and audiovisual materials.

In addition to document analysis, I obtained archival records and/or audiovisual materials that provided me with further insight into each institution’s ATEP. Through the use of the Internet, I searched for associated information regarding the success of these programs and any pertinent information that pertained to athletic training education at these institutions.

Data and Interview Analysis

Upon the receipt of the transcripts, I assessed each one for accuracy by listening to the audio recording while reading the transcript. As previously mentioned, I corrected any and all errors that were found. As expected, I had to listen to these interviews and read over the transcripts multiple times in order to become more familiar with the data. In addition, I also sent the transcripts to the participants to allow them the opportunity to review for accuracy. I then made any and all needed modifications to the transcripts that were suggested by the participants. If no response is provided, I assumed that no further changes or corrections were needed.

In conducting a data analysis, the researcher should always keep the purpose of the study in perspective. In this study, interviews, documents, archival records and audiovisual materials served as the data. Merriam (1998) suggested that data analysis and data collection occur
simultaneously. With this in mind, I was able to achieve a continual process of collecting data, reviewing data, and analyzing in a way that allowed me to make any needed adjustments to future interviews based on ideas and questions that come about throughout this interview process. After reading each transcript numerous times, a summative evaluation was written, a profile was made for each participant, and notations were made of any emerging categories that helped to answer the research questions posed in this study (Merriam, 1998). I then attempted to seek out any themes that stemmed from these categories and utilized direct quotes from the data to illustrate such. Utilizing direct quotes will allow me to effectively express the perspective of the participants by utilizing their own words.

**Coding.**

According to Patton (2002), the first step of content analysis is developing a manageable coding scheme. “Without classification there is chaos and confusion” (Patton, 2002, p. 463). Patton argued that content analysis involves identifying, coding, categorizing, classifying, and labeling prominent patterns in data. Thus the researcher is left to determine what is significant based upon his/her analysis of the core content of interviews and observations. With this in mind, I utilized the interviews to seek out words, phrases, categories, subcategories, and patterns that helped me to organize the data. Since I had numerous interviews to analyze, I sought the use of NVivo10 qualitative computer software to assist me in creating and using a coding scheme. The use of this software helped to further assist me in placing information into themes found to be emergent within the interviews. I was then able to compare these themes and identify subthemes. As a result, I felt as though I improved the overall accuracy of this study through the use of this software.
Enhancing trustworthiness and validating findings.

According to Patton (2002), the researcher must verify the accuracy of the research findings in order for qualitative data to be deemed valid. In order to establish qualitative validity within this study, I utilized triangulation, member checking, and peer debriefing of this study’s results to enhance trustworthiness.

**Triangulation.**

Creswell (2008) found triangulation to represent “the process of corroborating evidence from different individuals, types of data, or methods of collection in description and themes in qualitative research. The inquirer examines each information source and finds evidence to support a theme” (p. 266). Through the use of various forms of data sources, multiple perspectives, numerous data-collection methods, and multiple investigators, triangulation was made to ensure validity of the research.

**Member checking.**

Member checking was used to determine the accuracy of the findings within this qualitative study. Creswell (2009) described this being effectively achieved by consulting the participants for their insight and approval based on the alleged themes identified within the study. In this study, each participant was first afforded the opportunity to review his/her transcript for accuracy and completeness and second was presented with evidence of the emergent themes. This review helped to ensure accuracy of the facts and allow for additional noteworthy information to be provided by the interviewee to the researcher.

**Peer debriefer.**

As a third means to ensure trustworthiness, a peer debriefer was used to ask questions and review answers to the questions within this qualitative study to ensure meaningful findings
beyond that which was found by the researcher (Creswell, 2009). I enlisted the assistance of a coworker to provide external reflection and input on my study, thereby adding to the overall validity of the study.

**Additional strategies to validate findings.**

In addition to triangulation, member checking, and utilizing a peer debriefer to enhance the validity of this study, I logged my progress throughout the research process by writing in a personal journal. The journal allowed me to re-trace all the steps of the research process. In addition, this journal added to the overall confirmability of this research due to the thick description that it provided regarding the research process.

**Ethical Considerations**

Throughout the research process, ethical issues were evaluated (Creswell, 2008). Prior to the start of collecting data, approval was sought from the dissertation committee. Once approval was obtained from both the dissertation committee and the Institutional Review Board (IRB), I proceeded with my research in a way that remained in compliance with IRB standards in regards to working with human subjects at each research site. By conducting interviews by phone, there were little to no disruptions made to the research sites selected for this study (Creswell, 2008; Creswell, 2009).

I respected the rights of the participants by fully disclosing the purpose of this study. Explanations were given regarding the use of results and awareness was presented in reference to any consequences the study may have on the participants and the sites in which they work (Creswell, 2008). As previously mentioned, a consent form was distributed to each participant via email prior to the time of his/her scheduled interview. The participant was then asked to return the form to me via email. Before the start of the interview I confirmed that the consent
form had been reviewed by the participant and once again allowed them the opportunity to refuse participation. I remained open and honest with all participants to the best of my ability. I was sensitive to any emotions that the participants displayed (Creswell, 2009) and ensured them the right to withdraw from the study at any given time without consequence.

Research data collected was kept in a secure place at all times. As the researcher, I was the only person to have access to this information. Data was reported accurately and honestly (Creswell, 2008). If asked, I provided the research site with a copy of all findings (Creswell, 2008).

Pseudonyms were used to identify each institution and all participants involved in the interview process and in reporting of findings. I did not reveal actual names of the institutions nor the participants once the final selections were made. Prior to the start of the interview, I selected a pseudonym for each institution. Participants were asked to provide a pseudonym name by which they preferred to be called. The pseudonym was then used to address the participant throughout his/her interview with me. Once the interviews were transcribed, each participant was offered the opportunity to read the transcribed interview.

**Delimitations**

This collective case study focused on the perceptions of ATEP directors, clinical coordinators, and faculty instructors in regards to the value of internships in Athletic Training Education Programs. Thus, this research was confined to 1 to 5 members (varying from that of the proposed 3 to 5 members) from each institution from 5 of the 9 proposed southern region institutions that had established ATEPs. This level of depth and coverage in participation at the institutional sites was intended to add to the richness of the study.
When choosing a research site, I looked for institutions with established ATEPs with a history of some form of internship involvement supported within their curriculum over the course of the last 3 to 5 years. By utilizing this factor, I avoided collecting data at an institution that may have been structurally biased against internship experiences. Furthermore, the participants selected were able to discuss the phenomenon within the context of their respective curriculum.

**Limitations**

There were certain limitations in this study due to the research design. Due to the nature of the ATEPs, the participants represented various ranks of the professoriate and levels of involvement within the programs. Some participants had more involvement with the students than others based on their position and, in turn, had varying degrees of opinion in regards to the internship experience overall. Therefore, not all perspectives were similar solely based on the participant’s position within the ATEP. Additionally, participants tended to provide biased views based on the nature of their ATEP and the level of interest that they had in regards to internship experiences within that particular curriculum. This bias was often found to be a direct result of the type of experience that they were afforded as a student of the profession. If they had a positive experience within an internship experience, then they generally had a positive outlook on the value of internship. However, if their experience was one that was negative then their perception of internship involvement was less favorable. Again, thick description interview data and effective interview questions, combined with measures to enhance trustworthiness were designed to diminish the effects of researcher error.
Conclusion

With the predominance of athletics in the world of sport today, the quality of healthcare providers assisting in the care of athletes is a significant problem for which professionals and educators are accountable. Athletic training is just one of many healthcare professions in which the constant change and demands of society place burden on the way in which the profession operates, evolves, and develops. It is with this in mind, that ATEPs must constantly evaluate the curriculum offered to students and determine best practices in order to contribute to the success of the profession and future professionals.

This qualitative case study explored the perceptions of ATEP program directors, clinical coordinators, and faculty instructors regarding the value of internships within the curriculum of athletic training. The study involved multiple institutions and multiple participants. It was the intent of this research to provide further implications for curriculum development to be made in regards to internship experiences. The results of this study were intended to be useful in the future considerations of athletic training education experts in what should be important to include within the curriculum and what makes for the best education for these future professionals.
CHAPTER IV
RESEARCH FINDINGS

The purpose of this qualitative case study was to gain educators’ insights on athletic training education and the role that internships play in the preparation of its students for future careers in the field. This qualitative study utilized a phenomenological approach to investigate the perceptions and experiences of ATEP directors, clinical coordinators, and faculty instructors in order to gain understanding of the overall phenomenon of internships within athletic training education curricula. This format allowed for a thorough examination of the point of view of this unique population. The primary research question utilized in this study was how valuable is the internship/clinical education experience in an ATEP student’s preparation for a career as a certified athletic trainer (ATC)? Secondary research questions included but were not limited to:

1. How have the changes made within the Athletic Training curriculum, in response to program accreditation, affected ATEPs and students?
2. What differences, if any, are there amongst programs and what the students are learning?
3. What specific components of the internship make it a valuable experience for the student?
4. What are problematic areas or limitations within the internships?
5. What practices have emerged to better educate students through internship experiences?
6. What formal and informal learning experiences within the curriculum help the ATEP student to better prepare for the job?
To begin, I have set the tone for these research findings by providing a description of each of the institutions utilized within this study. Next, participant profiles are provided to allow the reader to gain a brief biographical description of each of the participants. Finally, I have ended with discussion of the themes that emerged from the individual interviews.

**Institution Profiles**

Data was collected from five of the nine potential institutions mentioned previously within this study. These institutions varied in degree levels being either a Bachelor’s of Science in Athletic Training or what is known as an Entry-Level Master’s in Athletic Training. Each of these institutions exhibited some type of support of internship and/or internship type learning within their respective Athletic Training Education Programs (ATEPs). The following is a description of each of the five institutions utilized for this research study. Information regarding each of these institutions was obtained through archival research of the institution’s website and ATEP student handbooks.

Table 1 provided a brief overview of general statistics for each of these institutions and their respective Athletic Training Education Programs (ATEPs) including the pseudonym name chosen for each institution, the division type of the institution, the ATEP degree type, the approximate number of students accepted per cohort, and the pass rates for students in their first attempt of taking the Board of Certification (BOC) exam and the overall pass rate for the academic years ranging from 2011 through 2013.
Table 1

**Institutional and ATEP Characteristics**

<table>
<thead>
<tr>
<th>Institution Pseudonym</th>
<th>Institution Division Type</th>
<th>Program Degree Type</th>
<th>Approximate # of Students Accepted Per Cohort</th>
<th>1st Attempt Pass Rate for BOC Exam (2011-13)</th>
<th>Overall Pass Rate (any attempt) of BOC Exam (2011-13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>DI</td>
<td>Bachelor’s</td>
<td>15</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>B</td>
<td>DI</td>
<td>Master’s</td>
<td>15</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>C</td>
<td>DII</td>
<td>Bachelor’s</td>
<td>20</td>
<td>55%</td>
<td>87%</td>
</tr>
<tr>
<td>D</td>
<td>DI</td>
<td>Bachelor’s</td>
<td>16</td>
<td>77%</td>
<td>85%</td>
</tr>
<tr>
<td>E</td>
<td>DI</td>
<td>Master’s</td>
<td>14</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

In Table 2, requirements for admissions into each of the ATEPs were provided. This information was gathered through archival research of each institution’s website and ATEP student handbooks. Course hours earned indicates the required number of course hours earned prior to applying for the ATEP. Observation hours are the number of hours spent observing under the direct supervision of a certified athletic trainer (ATC). In addition, information regarding the requirements of an application, an interview, a complete physical exam, and letters of recommendation were also included.
Table 2

**ATEP Admissions Requirements**

<table>
<thead>
<tr>
<th>Institution Pseudonym</th>
<th>Course Hours Earned</th>
<th>Min. GPA</th>
<th>Observ. Hours</th>
<th>Applic.</th>
<th>Interview</th>
<th>Physical Exam</th>
<th>Letters of Rec</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>24 hours</td>
<td>2.5</td>
<td>100</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>n/a</td>
</tr>
<tr>
<td>B</td>
<td>UG degree</td>
<td>3.0</td>
<td>150</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>6hrs (2 courses)</td>
<td>3.0</td>
<td>120</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>6 courses</td>
<td>2.8</td>
<td>40(not req.)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>UG degree</td>
<td>3.0</td>
<td>50</td>
<td>X</td>
<td></td>
<td>X</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 3 clarified the requirements for each ATEP in regards to academic and clinical education. Semesters of study indicated the total number of semesters involved in order to complete the program. Total course hours indicated the number of credit hours required to complete the program. Total clinical hours indicated the number of documented hours allowed spent in the clinical education aspect of the program.
Table 3

**ATEP Academic & Clinical Education Requirements**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Semesters</th>
<th>Total Course Hours</th>
<th>Total Clinical Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>125</td>
<td>Min 200hrs per week per semester</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>59-62</td>
<td>Max 30hrs per week Avg per mnth over 2yrs</td>
</tr>
<tr>
<td>C</td>
<td>*6 or 8</td>
<td>85 or 120</td>
<td>Min 8hrs per week - Max 40hrs per week</td>
</tr>
<tr>
<td>D</td>
<td>8</td>
<td>124</td>
<td>Min 200hrs per Spring – Max 300hrs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Min 250hrs per Fall – Max 350hrs</td>
</tr>
<tr>
<td>E</td>
<td>6</td>
<td>60</td>
<td>15-20hrs per week per course of study</td>
</tr>
</tbody>
</table>

*Note.* * denotes variance pending three or four year plan option.

**Institution A.**

This large Division I flagship institution is a four-year, public university that enrolls approximately 30,000 total students. It is one of only 30 universities nationwide holding land-grant, sea-grant and space-grant status and offers a broad array of undergraduate degree programs and extensive graduate research opportunities. A Bachelor of Science in Athletic Training is just one of these many programs.

As with all programs involved within this study, Institution A is a Commission on Accreditation of Athletic Training (CAATE) accredited three-year program in which successful completion allows students to take the athletic training profession’s Board of Certification Credentialing Examination required to become a certified athletic trainer (ATC). This program is among the nation’s leaders in Board of Certification (BOC) Examination first-time pass rates with a three-year aggregate of 100%. Graduates from this program have gone on to establish
successful careers as athletic trainers in colleges and universities, secondary schools, professional sports programs, and various clinical settings.

This competitive program accepts approximately 15 students per cohort. Athletic training students must complete required clinical education hours in a variety of settings during the course of their program. Students are required to obtain at least an average of 10 hours of supervised clinical experiences over a three-week period during the academic semester and a maximum average of 45 hours of supervised clinical experiences per week over a three-week period during the academic semester. Hours are not to exceed a total of 80 in any week during non-academic periods. Only supervised clinical experiences count towards these hours’ requirements. A clinical experience week, or seven-day period, entails a Monday start and end of Sunday. All students are required to have one calendar day “time off” period during the course of the week. Although internships are not a required component of this institution’s curriculum, internship-style learning takes form within the off-campus sites of their clinical education experiences. These internship types of experiences are supported and encouraged by members of the faculty, staff, and instructors involved within the program.

Institution B.

This large Division I flagship and land-grant institution accommodates approximately 25,000 students and a multitude of academic programs. The entry-level graduate athletic training education program (GATEP) accommodates 15 students per cohort and is competitive in its selection process as most CAATE accredited programs are. Students seeking admission to the program must have a 3.00 GA overall, acceptance into the graduate school, have completed numerous pre-requisite courses, a minimum of 150 observation hours under the direct supervision of a BOC certified athletic trainer, three letters of recommendation, copies of all un-
official transcripts, complete an online application, a pre-admission physical examination, and pass a background check after being admitted to the program. As with Institution A, work hours are limited based on CAATE standards and guidelines. Similarly, these GATEP students are required to receive clinical exposure to individual and team sports, sports requiring protective equipment, patients of different sexes, non-sport patient populations, and a variety of conditions other than orthopedics. These students are exposed to clinical experiences that not only include intercollegiate athletics, but also high schools and physicians’ offices for a general medical rotations and orthopedic clinic rotations. This GATEP takes pride in its student philosophy of “Earn Learn and Return;” striving for the mindset of giving back to the profession.

**Institution C.**

Inarguably, the smallest institution included within this study, this Division II University accommodates 2,261 on-campus students and 2,833 online students. It is a state-supported, coeducational institution that places emphasis on the traditional learner yet maintains a strong regard to lifelong learning and service to the non-traditional student.

This ATEP places strong emphasis on the practical clinical experience coupled with specific professional course work. Classroom learning is put into action when the students are paired with staff athletic trainers to assist with the day-to-day care of the student-athletes. Various experiential settings range from intercollegiate to interscholastic. Students are exposed to a variety of sports and sport related injuries, in order to provide them with a valuable clinical experience.

The Bachelor of Science degree in athletic training, at this institution, consists of two components: (a) The pre-professional program (usually freshman year or first year for transfers) and (b) the professional program (sophomore through senior years). All students seeking this
route must either successfully complete the pre-professional program and/or make a formal application to the professional program pending their student status. However, there is no guarantee of acceptance following the completion of the pre-professional program. Students seeking admission must have a minimum 2.5 GPA in all general studies courses and a minimum 3.0 GPA in all athletic training major requirements completed prior to the application deadline, hold current American Red Cross Professional Rescuer First Aid and CPR or American Heart Association BLS for Healthcare Providers certification or Emergency Medical Technician equivalency, successfully complete the required athletic training practicum courses, and interview with the Athletic Training Curriculum Selection Committee.

**Institution D.**

This historic yet sizeable Division I institution, once known as a teachers’ college, has evolved into a comprehensive doctoral and research-driven university. The diverse student body is made up of approximately 15,000 students from 63 foreign countries including all regions of the United States and across its home state. As a dual-campus university, this institution spreads its wings to include not only the students of its two campuses but also five teaching and research sites and numerous online students. The University offers both undergraduate and graduate degrees in more than 180 programs through six degree-granting colleges.

The Athletic Training Education Program offers students the opportunity to obtain a Bachelor of Science degree in Athletic Training. This competitive program accepts a maximum of 16 students each year. In order to be eligible for consideration, students must have successfully completed all required prerequisite courses, have a cumulative GPA of 2.8 or higher, attend an orientation meeting to be held in the fall semester, complete 40 hours of observation under the direct supervision of one of that institution’s certified athletic trainers.
during the course of an eight-week observation period, as well as complete several forms, and submit letters of recommendation.

This program has an average BOC exam pass rate of 85 percent spanning over the course of the 2010-2011 through 2012-2013 academic years, with a first-time pass rate of 77 percent. This rate compares favorably with the national average of 82 percent during this timeframe. The goals of this ATEP include promoting an educational atmosphere that will provide each student with quality educational experiences, in both the classroom and the clinical setting; opportunities to develop and enhance clinical skills necessary to function as an entry level athletic trainer; and a variety of clinical rotation experiences including: individual and team sports, sports requiring protective equipment, patients of different sexes, non-sport patient populations, and a variety of conditions other than orthopedics. Students within the ATEP are required to maintain a GPA of 2.8 or higher, pass all athletic training major courses with a “C” or better, accept all clinical assignment responsibilities, and log a minimum of 200 clinical hours in each spring semester and a minimum of 250 clinical hours in each fall semester.

Before completion of the ATEP at this institution, students who have completed all coursework and clinical education requirements are required to take and pass a written and practical examination with a score of no less than 70%. This exam is offered to students in the fall semester of their senior year and is utilized to determine which students will be endorsed by the program director in order to be considered eligible to take the BOC exam. If a student does not pass this written and scenario-based “practice” examination, he/she is provided the opportunity to retake the exam in the spring semester at midterm and again during final exams if needed. Those who do not pass will not be endorsed by the program director and therefore cannot sit for the BOC exam that is required in order to become a Certified Athletic Trainer.
Institution E.

A leader in its home state and one of the largest research universities in the Southwest, this institution prides itself on a wealth of opportunities in which its students can pursue lifelong career goals. It is among one of the ten largest universities in the country and enrolls more than 50,000 students. It stands among the nation’s top 25 public universities, housing one of the top 10 public engineering schools. Of the more than 120 undergraduate degree programs and more than 240 master’s and Ph.D. programs, a Master’s of Science in Athletic Training (MSAT) is just one of the many degree programs that students may pursue.

This MSAT program is a professional (entry-level) athletic training program geared towards students who wish to pursue athletic training credentials by the Board of Certification (BOC) and a career as a Certified Athletic Trainer (ATC). The program is designed to challenge students to become competent, confident, and compassionate healthcare professionals that can serve an integral role as part of the allied healthcare team in the management of health related issues associated with sports and other activities. Both students and faculty within the program are highly encouraged to challenge one another in the development of their knowledge.

All MSAT students must maintain a grade point average (GPA) of 3.0 or better and pass with a letter grade of a C or better for all courses involved within the degree plan. Students are assigned 15-20 hours/week of clinical education time that is intended to allow for hands-on experiences in association with a wide array of patients, including sports teams and non-sport related patient populations, as well as those with varying conditions in which an athletic trainers are employed. These clinical rotations differ in length with some being longer than others and are integrated into the academic coursework over the course of the 2-year program. On occasion, students are assigned experiences at agencies outside of the institution. In these
instances, students are expected to incur all financial obligations associated with these types of experiences.

**Participant Profiles**

Interviews were conducted with a total of 14 athletic training education program professionals. As with the institutional names, careful measures were taken to ensure anonymity of each of the individuals’ names. In order to preserve the identity of the participants, pseudonyms were utilized from the start of the interview process and continued throughout. The following is a description of each of the individuals that participated within the interview process of this research study. These descriptions were intended to provide a more clear depiction of the participants’ backgrounds and their individual personalities.

Table 4 was developed to explain the broad characteristics of each of the participants. This included a breakdown of the individual’s professional role served within the ATEP, tenure status, the pseudonym name of the institution in which they are employed, and the type of degree program offered at each of their respective institutions. As shown here, participants included a total of five program directors, one assistant program director, three clinical coordinators, and five faculty instructors. Of the 14 total participants, the tenure status included a total of four tenured, two tenure track, two non-tenure track, and six instructors. The participants’ ATEP degree types varied between bachelor’s and master’s degrees.
Table 4

*Professional Characteristics*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>ATEP Professional Role</th>
<th>Tenure Status</th>
<th>Institution’s ATEP Pseudonym</th>
<th>Institution’s Degree Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerry</td>
<td>Program Director</td>
<td>Non-Tenure Track</td>
<td>B</td>
<td>Master’s</td>
</tr>
<tr>
<td>Jane</td>
<td>Assistant Program Director</td>
<td>Tenured</td>
<td>A</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Carlton</td>
<td>Program Director</td>
<td>Tenured</td>
<td>A</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Whit</td>
<td>Clinical Coordinator</td>
<td>Tenure Track</td>
<td>B</td>
<td>Master’s</td>
</tr>
<tr>
<td>Barbara</td>
<td>Instructor</td>
<td>Instructor</td>
<td>A</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Jane Doe</td>
<td>Instructor</td>
<td>Instructor</td>
<td>A</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Steph</td>
<td>Instructor</td>
<td>Instructor</td>
<td>C</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Billy Bob</td>
<td>Program Director</td>
<td>Tenured</td>
<td>C</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Susie</td>
<td>Instructor</td>
<td>Instructor</td>
<td>A</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Kay</td>
<td>Clinical Coordinator</td>
<td>Instructor</td>
<td>C</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>John</td>
<td>Instructor</td>
<td>Instructor</td>
<td>C</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>CB</td>
<td>Clinical Coordinator</td>
<td>Tenure Track</td>
<td>D</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Bill</td>
<td>Program Director</td>
<td>Tenured</td>
<td>D</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td>Sharon</td>
<td>Program Director</td>
<td>Non-Tenure Track</td>
<td>E</td>
<td>Master’s</td>
</tr>
</tbody>
</table>
Jerry.

Even before college, Jerry knew that he wanted to be an athletic trainer. He was the “atypical of a typical college student today.” His relentless drive and determination is what carried him through the journey that led him to his current position. As a Clinical Assistant Professor and Program Director of the Athletic Training Education Program at University B, Jerry has been involved in the educational aspect of his profession since 1990. He previously has served in the roles of Instructor of Athletic Training Education and Clinical Coordinator of Athletic Training at different institutions. Jerry completed his undergraduate coursework from what was then referred to as an internship-route program. After receiving his master’s degree (while serving as a graduate assistant athletic trainer), he served as an intern athletic trainer at a Division I university and worked approximately eight years as a certified athletic trainer in Division I athletics before pursuing his doctorate degree. During the course of his education, Jerry worked a three-week internship rotation with the Junior Olympics in Iowa, as well as having worked various sport camps. Jerry fell into the education realm of his profession after his program director, at the institution in which he was pursuing his doctorate, took a leave of absence to work with the Olympic games. He was “left behind to teach and run the program in its infancy stage.” Afterward, he went on to work as a clinical athletic trainer, then a clinical coordinator in a Division I institution while teaching, and now, as the program director at University B where he started the program from scratch.

Jane.

Jane started college with the aspiration to go to physical therapy school. While completing observation hours to help her gain admittance to physical therapy school she encountered an athletic trainer and quickly had a change of heart. Jane found that what she
“really wanted to do fell under the realm of athletic training and not physical therapy.” Though the institution that she attended did not have an approved curriculum at the time, Jane’s education fell in to the time frame in which she was still able to complete the requirements to sit for the Board of Certification exam through the internship-route process. She then went on to gain more clinical experience through a graduate assistantship and helped teach a class while obtaining her master’s degree. Her supervisors were pleased with her ability to teach and do it well. She recalled that from there “they had kind of directed me that pursuing a PhD would be something in my future that I should consider,” but it was her love for the clinical aspect of the profession that drove her. She continued to cover things clinically through sport assignments, taught class, and all the while pursued her PhD. Her passion for the clinical aspect of the profession was reflected not only in her first job as a clinical coordinator but continues to be found in her current role as the Assistant Program Director and her level of involvement in the hands-on and clinical aspect of learning.

**Carlton.**

For someone who got into the profession “by chance,” Carlton has spent the last 25 years working his way up the ladder in various roles and settings of the athletic training profession. He graduated from an internship-route program versus the now required curriculum route but took the extra initiative to gain more knowledge when he decided to take additional courses at another institution that did have a curriculum for athletic training. From industrial, to clinical, to college, Carlton has experienced a wide array of the profession and understands what each entail. Although he enjoyed each new experience he was challenged with, he found that his passion was college athletics and working with students who wanted to pursue athletic training as a profession. It was that passion that helped him complete his doctorate, start a curriculum at one
institution, and serve as the program director at two other institutions where his last stent began in 2002. If Carlton had not found himself “at a crossroads to different majors” during what was “probably about my second or third year in school,” his encounter in class that day with “one of the students who was an athletic training student” may have meant very little to him at the time.

Whit.

If anyone has an understanding of what an internship is like, Whit is definitely that person. Having graduated from an accredited program that was referred to as a Cooperative Education Program, Whit had the opportunity to experience both class and work on a rotation that alternated the two based on the semester and what year the student fell within the curriculum. His unique experience carried him through a wide array of settings that changed every three to six months throughout his five-year undergraduate program. He then went on to obtain his master’s at a one-year professional accredited program. His professional experiences have varied from high school, to Division II, to Division I athletics. Through these experiences, Whit realized that he “fell in love with the athletic training education part of it but not so much working with coaches.” It was that revelation that led him to pursue his PhD. Since that time he has taught in five different athletic training education programs. Whit is very well published and has participated in a wide array of studies conducted in numerous facets and institutions. Now the clinical coordinator at Institution B, Whit has served in this role since 2012.

Barbara.

Barbara’s athletic training experiences have come full circle in the sense of returning to her Alma Mater. Although her background is heavily cladded with Division I intercollegiate experiences, Barbara’s varied sport experiences at a high level of competition and teaching experiences throughout are what helped to bring her back to her home state. From the time she
was in graduate school, Barbara has taught “basic athletic training and first aid classes throughout.” Her return to her home institution finds her serving now as an assistant athletic trainer and an instructor within the athletic training education program at Institution A. She currently teaches “a practicum class and I also teach what would be considered a basic training class and that class would be a requirement to get into the program.” Her passion for teaching is found in her diligence within the classroom. This was demonstrated in her reference made regarding the goals of the practicum course in which she stated “we really teach and go over and beyond that one-hour credit to where it is almost a three-hour class really in content, just to basically help our students out and try to give them as much education…to make sure students achieve as much as possible.”

Jane Doe.

Athletic training was a career choice that tumbled its way into Jane Doe’s heart after taking an athletic training class offered at her high school. This former gymnast knew from the start that athletic training was what she wanted to do. The chance to combine both her passion for the profession and her love of the sport gymnastics was once a future that is now a reality. With a bachelor’s in athletic training and a master’s in higher education, she first took a job covering a high school. Although she loved that job, she always knew that she “still wanted to work at a position with collegiate gymnastics.” That was her “ultimate goal,” her “dream job.” From there she applied for some positions that would help to satisfy this desire. A little less than a year ago, she landed the position that she currently resides in as an assistant athletic trainer for gymnastics and an instructor in the athletic training education program at Institution A. Having a background in higher education, teaching experience, and knowledge and understanding of the sport of gymnastics is what makes her the ideal person for this position.
Steph.

Steph is an adventurer and not afraid of taking risks. Some would even say that this showed in her career path and how she ended up where she is today. Coming from a family with a strong medical background, Steph first started out in physical therapy but quickly found that her passion lied in rehabilitation, especially for sports-related injuries. After starting the physical therapy program at her undergraduate institution, she realized that instead of working at a clinic she would “rather be on the forefront and be kind of like right in the trenches when the injury happened.” She loved the idea of the “constant excitement” and “never know what’s going to happen.” It was these thoughts that helped her to decide that athletic training was what she wanted to do, not physical therapy. From there the adventure began. Steph transferred to another institution with an athletic training education program from which she graduated. From there she “took an internship with ESPN Wide World of Sports and Disney and that filled up the spring semester until I started grad school.” She received a Master’s in Kinesiology specializing in athletic training and then began the job search and “applied to anything that seemed of interest and I thought would give me that opportunity to experience life.” She felt as though “to be the best athletic trainer possible you have to experience athletic training in different parts of the nation or even the world just because everyone’s going to do it differently and everyone has something else to bring to the table.” That was one of the main things that attracted her to her current position as an instructor at Institution C. Having served as a teaching assistant in graduate school, Steph also found that “the education portion of this particular position was of interest me because I felt like I could not only help the students learn how to be good clinicians but it also made me a little bit more versatile.”
Billy Bob.

A seasoned veteran to the field, Billy Bob’s extensive experiences and background in athletic training and athletic training education are what many young professionals strive to achieve. As the program director for Institution C, Billy Bob has served in several roles and professional capacities at both his institution and within the National Athletic Trainers’ Association. This Hall of Famer has received numerous awards and recognitions for his tireless efforts in athletic training education and the profession. He has authored textbooks and continues to play an integral role in both the athletic training room and education sector today.

Starting out under what some would refer to as an “apprenticeship route,” he has no regrets in his experiences and where they lead him to today. He stated that he “really didn’t even do that because I had no one directly on a regular basis to work with.” He had to “become the head athletic trainer from day one as a freshman with no other support or helps and had to basically make all the decisions or the vast majority of the decisions by myself or in concentration primarily via the phone with some other people.” From there, he paved his way and his worth in his position and was hired on after graduation. He went on to get certified and, although not in his original plan, taught multiple courses as a result of a coach leaving. For years he served as the head athletic trainer and taught class, had a few athletic training students (who were doing the apprenticeship route that later became the internship route), and then decided to start the athletic training curriculum that he now serves as the program director of today. All during which he remained at the same institution in which he had his first experiences as an athletic trainer. Truly an experience that few remaining in the profession can now share.
Susie.

Susie was “thrown” into the educational aspect of athletic training while working at a school as a strength and conditioning coach that proved her knowledge in exercise physiology and various other areas of the field. She was asked to teach a course, one course led to another, and from there found that she “kind of fell in love with it.” Susie started out having graduated from an undergraduate ATEP. Before her undergraduate program became an official ATEP, she was an exercise major and was required to complete an internship that she chose to work with a baseball team as their athletic trainer. She went on to get her master’s degree in exercise physiology that led her to the position as a strength and conditioning coach. During that time, not only was she offered the opportunity to teach but also the chance to obtain a PhD. She has not looked back since. Susie currently serves as an instructor in kinesiology, at Institution A, where she was originally a “doctoral assistant for the program and then became the interim assistant program director.” Since that time, a full time assistant program director has been hired and Susie has moved to a faculty instructor position in the department of Kinesiology. Although she teaches mainly core courses within the department of Kinesiology, Susie does have extensive interaction with the ATEP students both inside and outside of the classroom. In addition to her teaching responsibilities, Susie assists with coverage at one of the local high school in which students from the ATEP frequent as a clinical education site. She not only serves as a certified athletic trainer in this role but also as a preceptor or supervisor of the students during their rotation at this site.

Kay.

Kay realized in high school that becoming a professional athlete was not in her future. However, with the help of her high school athletic trainer, she quickly realized that being an
athletic trainer was. Her determination and love for athletics helped her to have the courage to approach the clinical coordinator, at the ATEP in which she would later graduate, to find out what she needed to do in order to make a career in athletic training possible. Because the program was an intense 2-year program that fell within her junior and senior years, there was not much time for outside experiences. However, Kay managed to squeeze in one internship type experience “through varsity sports working with the cheerleaders at UCA (Universal Cheerleaders Association) and dancers at UCA” for one summer. From there she went on to graduate school as a graduate assistant athletic trainer and then started out her career at a small Division II college. Things were not really going as planned though. Kay was “more interested in the education side of athletic training by that point” and she wanted a position that would fulfill that desire. When a position opened up at Institution C, where she is currently employed, that would allow her “to do both clinical and academic work,” she “stepped up and took that job.” Having first served as high school outreach coordinator, Susie was responsible for 35 local high schools and was there to serve as a first responder but also to manage the graduate assistants and coordinate game coverage for the various sports and seasons. Kay is now the clinical education coordinator for Institution C in which she is now responsible for managing “the clinical site as well as assign the students to those clinical sites to clinical rotations.” In addition, “I also organize the program as a whole so I make sure that all of the adjunct professors stay within their curriculum,” as well as, “I am the athletic trainer for my institution’s cheer squad.”

John.

John started out his career path with interests in the field of physical therapy. However, after participating in some internship with physical therapy, realized that it was athletic training that he wanted to pursue. Right out of high school, John worked as a student athletic trainer at
an institution that did not have an ATEP but did allow students to serve in the capacity of volunteers. He worked all five years that he was there. He then took off a year from school, worked in a physical therapy clinic, and was then accepted into a graduate ATEP where he spent two years getting his master’s. Immediately following graduation, he served as the head athletic trainer for an independent professional baseball team and then as a part-time athletic trainer at a college where he also did outreach services for a local high school. All of these experiences led him to his current position at Institution C where he serves as an assistant athletic trainer and an instructor within the ATEP at this institution. He described his background as an educator as one that was not planned but “kind of just thrown into the fire” and a “trial by error” type of experience. He “never planned on becoming an educator” but quickly realized that in order to succeed in this position he would be teaching some classes and for the first year or so “taking it as it goes.”

CB.

Having graduated from an undergrad ATEP that was heavily weighted with hands-on contact with patients, CB was afforded the opportunity to gain experience in a variety of settings. CB attended graduate school while serving as a graduate/teaching assistant in which he taught in courses in the ATEP and served as a certified athletic trainer for multiple teams. Since that time, he has served in the roles of assistant athletic trainer, interim head athletic trainer, head athletic trainer, athletic trainer and assistant professor, and clinical education coordinator at various institutions over the years. During the process, he earned his PhD. CB currently serves as an assistant professor, as well as, clinical education coordinator for the ATEP at Institution D. CB described his role in simple terms, “So I teach but I also coordinate activities for the students.” This position allows for involvement both in and out of the classroom setting. He regarded his
role as being “primarily involved with the students in a classroom setting.” In regards to his role outside of the classroom with the students, he described as having “some involvement with them as far as I help cover some community events.” Although he does not have clinical responsibilities, these types of events allow opportunity for him to interact with the students and for the students “to come get clinical hours with me to help cover those events.”

Bill.

An educator through and through, Bill realized early on in his athletic training career that the educational aspect of the profession was where he wanted to be. This decision was heavily motivated by financial obligations and responsibilities. “In 1987, when I finished my master’s in sports medicine the job market was not very good.” The average pay for athletic trainers “was about $16,000 and, of course, still had the long hours that they have today.” He “wanted more out of a career” and felt as though teaching and research would fulfill that desire. Since that time, he has not served in that role and has no further intentions on working as a clinical athletic trainer. He became director of an undergraduate internship program and after completing his dissertation then filled the role of program director after his predecessor left that institution. He then went on to be a program director at another institution and was asked to go back to his original position to help out their struggling program. After many years of serving in this role and reestablishing that program, he was offered the opportunity to return close to home and help another program that was in trouble. However, his passion for research has followed him throughout this journey and now he serves as “25% reassigned time” for his current position as program director at Institution D. He teaches six credits per semester (four courses and three labs). The majority of his time is spent within the classroom and in research. He has “very little involvement in the clinical side of the program.” Due to his current responsibilities in serving as
program director, teaching, and conducting research, he relies heavily on the clinical education coordinator to oversee those responsibilities. However, the two work hand-in-hand to ensure the program’s success.

Sharon.

Sharon was a first-hand witness to the many changes in the field of athletic training and athletic training education over the years. Her undergraduate degree and experiences as a student athletic trainer were gained through an internship route and not through a formal curriculum. Although she “was not fortunate enough to have that,” she saw that there was so “much more that I would have learned if I would have been receiving a degree in athletic training.” Regardless, this did not stop her in pursuing and achieving her goal to become a successful athletic trainer and educator in the field of athletic training education. After obtaining her PhD, Sharon has served as a “program director at three different institutions and the clinical education coordinator at several institutions.” Some of these programs, she helped to develop from their infancy stage. Her current role as program director at Institution E is one that is “primarily inside the classroom and then in academic advising, mentoring, and research advising capacity.” She further described this role as being 100% academic.” Although she does “visit students at their clinical sites,” she has “no patient care workload as part of my contract.”

We know where we come from.

Terry Pratchett (2010) stated it best, “It is important that we know where we come from, because if you do not know where you come from, then you don't know where you are, and if you don't know where you are, you don't know where you're going. And if you don't know where you're going, you're probably going wrong.” For the participants of this study, knowing where they came from in terms of athletic training education provided a foundation for understanding
their views on athletic training education and the phenomenon of internships within athletic training education.

**Athletic training education background.**

The participants of this study came from a wide array of backgrounds in athletic training education. Due to their varying ages, which were not disclosed in these interviews, and the varying timeframes in which they obtained their degrees, there were some who were still able to participate in what was once known as the internship route or apprenticeship route to athletic training while others came through the ranks during the time in which graduating from a curriculum program had already been mandated as a necessary requirement to be eligible to sit for the Board of Certification (BOC) exam. Of the 14 total participants in this study, seven graduated from an internship route program and seven graduated from a curriculum program in athletic training or Athletic Training Education Program (ATEP). Table 5 provides a breakdown for each participant’s educational background and indicates whether or not they participated within an internship experience throughout their education and career which will continue to be discussed in further detail surrounding comments made later in this chapter.
When asked to describe their background in athletic training, most participants gave a very basic black and white description of their educational experience by listing the types of degrees they obtained, the institutions from which these degrees were obtained, and an overview of how they became a certified athletic trainer. However, in some instances, individuals
provided the researcher with a more personalized account of their experiences that allowed for a more clear understanding of their educational background.

For some, athletic training was the profession of choice from the start. These individuals declared their intended profession as athletic training and started out their college careers in pursuit of the necessary requirements to make it possible. Jerry said, “I worked as a student athletic trainer in high school, so I kind of knew what I wanted to do before I got to college.” Jane Doe said, “My high school offered an athletic training class and that’s what I took and decided that’s what I wanted to pursue in college.” Kay said, “I actually started athletic training my freshman year of high school.” She recalled her experience being related to her high school athletic career and stated “I had an athletic trainer in high school and she had noticed that I didn’t really have any extra-curricular activities. I was an athlete and so I quit athletics and then after that she mentioned athletic training…” From there she started helping out and realized that “it was something that I was interested in doing and I just never left.” Whit, Billy Bob, Susie, Barbara, CB, and Sharon all indicated they all “wanted to be athletic trainers” and so they majored in whatever degree that their institutions offered to help them reach their goal.

In some cases, athletic training was an after thought once they decided that they had mistakenly chosen the field of physical therapy to start their college careers. For example, Jane recalled:

I thought I was going to go into physical therapy and while I was doing some of my observation hours I ran into an individual who was an athletic trainer and realized that what I really wanted to do fell under the realm of athletic training and not physical therapy.
Steph describes her short-lived experience in physical therapy as a result of an injury caused from being a fencer in high school. She stated:

Once I started the program I realized that instead of working at a clinic I’d rather be on the forefront and be kind of like right in the trenches when the injury happened and have that nice dynamic change, kind of that constant excitement, you never know what’s going to happen, and that’s how I decided I wanted to do athletic training more than physical therapy.

John simply remarked that he “kind of wanted to go that route with my career early on.”

There were other cases in which the participants expressed that although athletic training was not a career path they originally sought, they soon came to discover that it was what was meant for them as a future professional. Bill recalled, “I didn’t know about athletic training until my senior year as an undergrad.” Once he found out about it, Bill quickly he changed his mind in what he was doing.

Carlton stated “I started probably by chance.” Like Kay and Steph, Carlton was a high school athlete. After sustaining an injury, Carlton noted:

I couldn’t play college sports so I heard about athletic training, and this was probably about my second or third year in school and I was kind of at a crossroads to different majors and one day in class talked with one of the students who was an athletic training student at school and that’s basically how I got started.

*Teaching background.*

Similar to the various reasons as to why the participants in this study chose athletic training as their profession, the reasons they chose to become educators were just as diverse. Some stated that their path to education was just as accidental as their path to athletic training.
Again, Carlton remarked, “how I got started was more so just by chance.” Similarly, Billy Bob said he “wasn’t planning on teaching necessarily but initially did have to teach.” He talked about how the introduction to athletic training class that he started out with later turned into the establishment of a curriculum. John said he was “just thrown into the fire,” when it came to teaching.

There were some that started out teaching as part of their responsibilities as a graduate assistant. Jane remarked, “My supervisor basically had me teaching a class as part of my graduate assistantship.” Both Carlton and Jane talked about the “need for more clinical experience” and how that led them to pursue a master’s degree that would later lead them down the path of becoming an educator. Similarly, Barbara said that she had been teaching since she was in graduate school. She now teaches a practicum class at her current institution that she described as a “basic training class and that class would be a requirement to get into the program.”

Steph said that her experiences as a “lab TA (Teaching Assistant) for biomechanics” and the “weight training class” that she taught made her realize “I always liked trying to help out students as much as possible.” She said she enjoys “clinical skills and general science, but I mean, any way I can help I would love to.” Those thoughts are what led her to her current job. Steph concluded with, “I felt like I could not only help the students learn how to be good clinicians but it also made me a little bit more versatile.”

Like Steph, Jane Doe said that her experiences as an “unofficial volunteer TA (Teaching Assistant)” is what helped her to realize that she loved teaching and was what lead her to be able to start teaching regularly in the program that she is now employed. Likewise, CB said that he spent “two years as a TA/GA (Teaching Assistant/Graduate Assistant).” After those two years,
he went on to explain, he later became a professor at another institution while working on his PhD.

Carlton, like Steph and Jane Doe, spoke about how his experience helped him to realize “I really wanted to work with students more.” Jerry, Bill, Carlton, and Billy Bob all spoke about how they were “left behind to teach and run the program.” Jerry talked about how this experience led him to later become a program director of a curriculum that he started from scratch.

Others explained that their reason for becoming a teacher was based on the desire to have both financial and job security. Bill spoke of how poor the job market was when he graduated from his master’s. He said:

The athletic trainers were – I think average pay was about $16,000 and, of course, still have the long hours that they have today and I just – I wanted more out of a career. I felt like I could do that with teaching and research.

Bill continued by explaining that it all started for him with being “thrust into running an undergraduate internship program.” Like Bill, Kay just knew she had “more interest in the education side of athletic training.” For that reason, she chose to seek out a position that would satisfy both her love for athletic training and for educating.

Sharon’s thoughts of the future of athletic training mimicked Bill’s. These were thoughts that were kept in mind when she decided to become an educator. She recalled, “That was before the curriculum programs were the only route to BOC (Board of Certification), but it did seem to be something that was in the fairly near future.” She went on to explain, “I enjoyed teaching very much and I also enjoyed academia and I had been out of it for a few years and I thought that
would be something that I wanted to look at for my future.” A future that now finds her as a program director for a program that she implemented herself.

Whit, on the other hand, shared Bill’s desire “job security” later in life. He remarked on how at a former job, he “fell in love with the athletic training education part of it but not so much working with coaches.” For that reason, he pursued his PhD and has since “taught in one, two, three, four, five different athletic training education programs.”

**Research Themes**

Based on the analysis of the data obtained from the one-on-one interviews conducted with ATEP program directors, clinical coordinators, and faculty instructors about their perceptions and experiences regarding internships and their role in the athletic training education learning experience, two major themes emerged. Those themes were: Knowledge and Experience….But a Lot of Experience and An Interesting Kind of Evolution. Additionally there were subthemes that provided more detailed insight of the broad themes.

**Knowledge & experience…but a lot of experience.**

One could argue that athletic trainers will never be seen as the healthcare providers that they are if a move is not made to raise their standards of education. However, one could also argue that athletic trainers will not continue to be the professionals that they always have been without the clinical and hands-on experiences that they have always embraced as a profession. As described in the participant profiles, some individuals graduated from curriculum based programs while others were still allowed the option of participating in an internship route learning experience. Regardless of the various educational backgrounds in which the participants came from, they all agreed that their educational experiences as a student helped to mold them into the professionals and educators that they are today. Throughout the interview
process, it was made clear that their varied experiences often led them to have educational philosophies that were similar in regards to the role of knowledge acquisition and clinical practice. This theme will explore the participants’ shared philosophies and provide insight on how those philosophies were adopted. This theme will also explore the nature in which these philosophies are reflected in their interactions with students.

*How clinical experience is valued.*

The only way you can be a good athletic trainer is to have that drive, have an open mind, to have that motivation, to just throw yourself out there and not be afraid to make a mistake because that’s the only way you are going to learn.

Steph, having graduated from a curriculum program, was a firm believer in varied professional experiences. She continued by commenting on how today’s students are very different from when she was in school and that they “come from a different dynamic – they have different ideas.” She described her experience as “making a fool out of myself constantly just to learn.”

Steph’s teaching philosophy reflects that of her personal learning experiences. She explained:

I try to take that experience and portray to the students that it’s okay to make a mistake, it is okay to not feel like you are successful all the time just because – I mean, that is part of the learning experience. You are not going to learn unless you, not necessarily fail, but you make those mistakes.

Susie remarked that her experiences had “an immense influence” on her current philosophy. She stated, “I loved my experience as an undergraduate student and I tried to take as much knowledge as I can from where I came from and apply to what I’m doing now.” Looking back, her experiences in an undergraduate ATEP program made her appreciate both her
preceptors and faculty and “look up to who came before me and whom I learned from, too.” She went on to say “I apply that knowledge constantly.” Susie utilizes this knowledge in the classroom to teach athletic training students courses such as biomechanics and outside the classroom as a preceptor or supervisor of clinical education experiences at one of the ATEP’s high school sites.

“Everybody always thinks their undergraduate degree is the best undergraduate degree there is” Kay said, casually mocking the sentiments of others. She continued:

But I really do feel I had a really good knowledge base and a really good example of what a good program should look like from my experience. From this day I pull out old worksheets that I did in undergrad for my classes to help teach students.

From a clinical standpoint, Kay commented on how she has kept in touch with her old preceptors or ACIs (Approved Clinical Instructors – as they were once referred to) and some of the students she graduated with and how they “compare notes and talk about different ways that we can do things.” Kay has utilized these ideas in her daily practice as a clinical coordinator in her respective undergraduate ATEP.

John discussed his feelings in regards to his former learning experiences. Having graduated not so long ago, he recalled:

It definitely has a big role especially with me going through a graduate program. Everything was pretty much where we had to learn on the fly. We had to learn rather quickly to fit four years of information into two unlike what we do here with a bachelor’s degree.
In regards to how that applied to his teaching methods, John stated “I kind of feel like I can still relate to them better and kind of know what works and what doesn’t work teaching-wise from when I was in graduate school.”

Although the program that he serves as an instructor for now is an undergraduate program as opposed to a graduate program, John stated:

Sometimes I feel like I’m able to slow down and explain things a little better than maybe we did in graduate school due to the fact that we only had a short amount of time so a lot of things were sped through rather quickly.”

For this reason, John tries to pace his teaching to allow the students to learn more at their own pace. When students are having trouble comprehending a topic, he spends more time focusing on that particular topic until they learn and have a better understanding.

Barbara found it easy to relate her philosophy to her current teaching practice because she is now employed at the same place where she obtained her undergraduate degree. She remarked:

We do a really good job of doing clinical human relation with our students and so that is where they are going to learn what’s going on in the classroom and then we are going to roll that out into a simulation where it really does help our GAs and our staff and our students to basically identify what a risk is and what can be done to basically make sure the situation is handled correctly in an emergency. So, that is definitely a hands-on scenario. So we do scenarios that are basically re-enacting emergency situations so the hands-on practicum part is huge.

During her time as a student, she recalled “we did a lot of I guess what you would say cognancy, so we broke that down.” The class that Barbara currently teaches is a practicum class that focuses primarily on the hands-on aspect of how to deal with student-athletes in emergency
related situations. The “clinical human relation” that she described in regards to her teaching style mirrors what she referred to as “doing small snapshots” or the hands-on experiences that she referred to in her undergraduate experience. In fact, she best compared her philosophy to her undergraduate experience when she said, “that’s what I had when I was in school.”

Jane Doe stated that her educational experiences had “a lot” to do with her education philosophy. She commented:

I try to think back on the professors that, you know, kind of mentored me or that I learned a lot from their class and I think – I try to kind of, you know, guide some of my teaching and learning experience to that.

She went on to describe how her experiences helped her to keep an open mind as an instructor and in doing so she tries to allow the students to voice their opinions and then she somewhat tailors her teaching style to them while still providing them with the information that is needed. She also stated that “I also try to get a wide variety of visuals and learning labs and guest speakers because I know that helped me.”

“Sure,” said CB, when asked if his educational experiences influenced his philosophy. He went on, “I did get a lot of hands-on clinical experience that I think was a positive in my educational environment when I was a student and so I try to do that with our students.” Similarly, he commented on his experience with “graduated supervision” and how that is reflected in his philosophy. “I felt like my preceptors at some point established a level of trust where I got to perform more of the tasks without their direct supervision.” In regards to his current role as a clinical coordinator, he said:
I think one of the important skills that a preceptor is going to learn over time is being able to stand back and let the student get the experience as opposed to making them watch an experience and hoping they are going to learn something from it.

Similarly, Jane talked about the value of applying what is learned in the classroom to the clinical experience and how marrying the two makes for a better learning experience for the students. She commented:

I think it has a huge, huge influence, I think for me and for my students. So their clinical experience is extremely, extremely important. I feel like the student needs to be in the clinical setting for a large period of time in order to experience what the textbook says. I think they need to get their hands dirty and see what it is like to do these special tests, to do all of the various skill sets. So to me, you know the more clinical experience they have, the better.

Jane, having graduated from an internship route to athletic training, remembered what it was like to have a vast clinical experience in her education. Although she has not been at Institution A for very long, she has carried her philosophy with her from her previous experiences and has incorporated that into her teaching style.

Jerry, like Jane, also graduated from an internship route to athletic training. He recalled words from a mentor of his that said, “Teach the program, not your passion. You know, passions are okay but you need to focus on what the student needs to know at that given time of their educational level.” For Jerry, teaching in a two-year entry-level master’s program limits the time that he has with the students. He described his ATEP as being very intensive and purposeful. He commented, “One of our goals here at our university is earn, learn, and return. You have earned it, you’ve learned it, now give back.” In other words, Jerry resonated on the idea that as
an educator, once you get your degree you have learned all the components to athletic training and the best way to support the profession is to give back what you have learned. Having stated that, Jerry went on to explain that although in-class knowledge is very important in student education, it is out-of-class experiences that play a big role in their overall understanding. Jerry stated, “That’s where students are really going to see the real-world situation and it has to be paramount.”

Billy Bob described his experiences in the internship and apprenticeship routes as having helped him to see “the value of the hands-on experience.” He recalled:

I certainly learned a lot – of course, I didn’t have courses when I went through school, I was somewhat self-taught as far as studying and all. We had great physicians to work with and there were some leaders in the profession that I would talk to occasionally at meetings. But, as far as locally, I would just have to study on my own. And of course did all the other stuff. So I really see the value of just being deeply involved and a lot of hands-on experience, seeing as many patients as one can, and being involved with that from the beginning with prevention and all the way through evaluation and treatment and rehab with a variety of patients. I think that is what’s really important and all. Anyone or most people I should say should be able to read a book and study and all that. But, it’s the hands-on application I think is the absolute – there is no substitute for experience.

Billy Bob mirrors that philosophy in his ATEP. As the director, he has designed a curriculum that provides the students with varied clinical experiences throughout and optimizes the hands-on time within the educational process.

Bill stated, “it certainly did have an influence, but my educational preparation is so much different than what the current students’ preparation is.” Similar to Billy Bob, Bill went through
the internship route to athletic training and described his experience as being one that was independent and self-taught in regards to the classroom and the research that he had to do in order to obtain the knowledge that he felt was needed. Bill stated that he had “wonderful mentors, and during the 1800 hours of clinical work that was required at the time for the internship route I learned an awful lot from him.” However, it was the independent study that he described as making him the logical thinker that he saw himself as having become.

During the time that Bill was in school, there were major changes to both the curriculum and clinical hours required. Bill explained:

It’s a little odd that we became more and more of an academic profession as opposed to a mentorship profession but now the students are being required to do some of the same things that I was with evidence-based practice. I guess for me it wasn’t so much doing the research back then, it was just trying to make sense of all the different things that I was seeing, so it definitely influenced my thoughts on just being – the importance of students being very critical, logical thinkers.

Bill now finds himself as a program director that is heavily involved in research and tries to incorporate that in his teaching.

Sharon, having also come through the internship route to athletic training, recalled there were many times in which she worked unsupervised and even traveled with teams unsupervised, something that was not uncommon during that time. In regards to how these experiences influenced her education philosophy, Sharon commented:

I feel that not being involved in athletic training curriculum as a student and not receiving direct supervision, or in many cases adequate supervision, I do realize the importance of that in preparing our students and safeguarding our students and teaching our students
and mentoring our students. But I also understand that there are some constraints that are put upon accredited education programs that has shown in some ways to be a bit limiting for student growth.”

As the program director at her institution, Sharon agreed with current practices and felt that having an accredited curriculum program is the way to go in terms of athletic training education. She said:

I do believe that if you are going to practice as an athletic trainer that you should have a degree in athletic training. I was not fortunate enough to have that and I feel like I should write an “I’m sorry note” to every student I treated in undergraduate. There is so much more that I would have learned if I had received a degree in athletic training.

She is reminded of these thoughts in her daily responsibilities of teaching, academic advising, mentoring, and research advising.

Carlton stated that his experience through internship route left him feeling as though he needed additional course work in order to be prepared for the board exam. For this reason, he decided to attend another university for a semester and take some of the courses that he knew he needed to in order to sit for the BOC (Board of Certification) exam. He remarked:

I saw there was a big gap in my knowledge base. I think from going the internship route…I had great athletic trainers, I wouldn’t trade them for anything in the world, but at the same time it was a lot of – it was just the internship…how it was back then it was almost like, you were doing professional development. You have got to learn and you have got to be a real animal in terms of seeking out knowledge. That’s kind of how I look at it.
Carlton went on to talk about how he believes that clinical and classroom education are both vital to the education process. He remarked:

My philosophy today is, and I think it not so much a philosophy but more so of a fact, that curriculums today, and I think successful ones, have to have a very good mixture or blend of today’s healthcare provider. They can’t be a healthcare provider if they don’t have hands-on patient care and they can’t be the healthcare provider if they don’t have a solid knowledge base.

Whit, unlike any of the other participants, graduated from a curriculum program that was tied with a co-operative education program. He described this program as being a five-year program with an accredited athletic training curriculum that included supplemental internships. He stated, “every program at the university mandated that you utilized the cooperative education thing because it better prepared people for jobs in their future.” When asked whether his experiences had an influence on his philosophy as an educator, Whit remarked:

Oh, definitely. I was a – I was in the transition phase, so there was still – when I was in school still internship routes to become certified and prior to me being certified I was traveling on my own making medical decisions that I had no preparation in making, that I probably shouldn’t have been making at the time as part of my clinical rotations and curricular assignments.

Although this exposure helped Whit to learn, it also helped him to appreciate and understand why changes were made in the education process and why curriculum and “constant supervision” are now a requirement. For these reasons, Whit believes that “preceptors need to come into play and challenge students in everything they are doing and involve them.” Now, as a clinical coordinator, Whit makes this part of his daily responsibility and mission when dealing
with preceptors and fellow athletic training professionals who are responsible for teaching students in the clinical settings within that institution’s program.

**Sink or swim.**

As previously mentioned, the participants came from various educational backgrounds. Some of them now teach in programs that may vary from their personal learning experiences. Regardless, it was evident that their experiences are what drive their philosophies and the way in which these philosophies are incorporated in their everyday teaching and the supports they provide to students as ATEP professionals.

“It is like throwing them in the water and seeing if they can sink or swim but you are there to make sure they don’t sink!” Steph remarked enthusiastically. She continued, “They need the experience!” These were comments that were made when asked what she thought students needed the most in terms of their preparation for the profession. She continued her thoughts by talking about the need for a good clinical background and how students “getting thrown into the trenches, being challenged, being questioned” are the ones who are going to learn.

But, Steph was not the only one who thought experience was a major need for students in terms of their preparation for the profession. In fact, experience was one of the answers across the board. All of the participants had their own way of expressing what was quickly summed up to be the more, the better. Experience was not the only thing they talked about though. The quality of instruction and education that the students received from the preceptors was also a noted topic. Like Steph, Carlton, John, and Whit also talked about how it is important for students to be challenged in a way that helps them to better prepare.
Carlton said the best advice that he can give a student when asked how can they prepare themselves is “Go get a job.” He said that it is the only way that they will learn the communication skills, people skills, and how to handle situations that they will find themselves in at any given time. His sentiments hit home the hardest when he talked about his experience with the bombing at the Boston marathon and how the students he had there with him were “battle tested and didn’t even know it.” He recalled:

I was at the finish line along with several other athletic trainers and there were about 20 or 30 athletic training students that were there behind us when the first explosion went off. The one thing I recognized was, and there was a hodgepodge of first year, second year, third year students from different schools across the country and we had one of our students who was a first year student – he hadn’t even finished his full first year in the clinicals, you know, here, and if there was one thing that they learned, they didn’t know how to do certain things, but they knew how to stay – all of them – the one thing I recognized and it is a communication skill and how they handled things, they didn’t know what to do and trust me there was time when I didn’t know, you know, and it was overwhelming for me as well and everybody else, but if there is one thing that held true was their work ethic and communication. They knew how to follow orders. They knew when to move forward, when not to move forward. They didn’t do something out of sync and that’s something that you can’t necessarily teach. You don’t learn that in a textbook.

On the other hand, John talked about the lack of confidence that students have. He said, “I strongly believe in trial by fire.” He went on to comment on how “Maybe preceptors need to take a step back and let the older student handle the situation or the injury first and get their feet wet.” He believed that this would help to build up the students’ confidence and their decision-
making and rehab ability. Whereas, Whit talked about how students need to be “held to a standard.” He said:

They need to be called out if they can’t back themselves up to a coach or if they can’t communicate with a physician appropriately about an injury, if they can’t effectively communicate with a parent about, you know, a high school or even collegiate athlete and their injury.

CB talked about how changing the structure to the educational programs may be the solution to the problems of both “experience” and “time.” He went on to say that students “are so bogged down with some of the other general education requirement classes that they just don’t have time to focus on what we’d like to focus on.” Similarly, Sharon talked about how the structure of programs does not always allow for time in which students can experience everything that is needed. She said those that she has found that those who had more limited time and exposure “are not as invested in athletic training, are not as knowledgeable and comfortable with athletic training.” Sharon went on to say:

There are just so many nuances to the world of athletic training, and, obviously, you don’t expect a novice or a young professional or a new graduate to understand all the aspects of athletic training or have experienced all the aspects of athletic training or have been put in all the various situations that a more seasoned professional would be placed in, but I think that in some cases they are being limited and so they may be in some ways less prepared for the work force.

She further explained how she felt these limitations were more found in the clinical aspect of the education and not the coursework.
Jane kept it simple, “Experience. I think they need as much clinical experience and as much clinical time as possible.” She said that is why she is such an advocate for internships and other experiences that allow the students to be involved in other things. Like Jane, Billy Bob and Jane Doe both said that students need “hands-on experience.” Billy Bob said specifically, “Experience, hands-on experience where they are expected to make significantly – or significant input into decisions that are made. And to bare some responsibility for those decisions.” Whereas, Jane Doe commented, “I do think a lot of hands-on experience.” She talked about how exposure to different scenarios and situations would allow the students to be more prepared for when they see things in actual practice. She said that practicing the skills they learned in class is the only way they will be “prepared for certification and being out on their own.”

Barbara’s comments built off of Jane’s, Billy Bob’s, and Jane Doe’s. She remarked, “Hands-on and understanding time management, making sure that they trust their clinical skills and they truly know them. That’s one big one. And then understanding what our job really entails.” She said that is something that can only be understood over time. Kay agreed with Barbara that time management and hands-on were both a must. She talked about how the increase in research in the field of athletic training is helping with that because “our students are actually being forced to have a little bit more hands-on research and I think that’s going to make a huge difference.”

Bill’s thoughts mirrored earlier comments made by Barbara. He talked about how some of their graduates lack the skills needed to deal with coaches and parents because it is not something that is really taught. He said those are “things that you really don’t teach them that they just have to experience.”
In regards to quality instruction, participants like Jerry kept it short and sweet “quality clinical instruction.” His thoughts, like CB’s, suggested that there is a need for “quality preceptors.” He expressed his thoughts on the importance and the struggle that some programs have with younger more inexperienced instructors and limited clinical sites. These thoughts played off of those made by John earlier in this section.

Bill followed suit to CB and John when he talked about how preceptors “don’t allow the students to do the skills that are required.” Instead, he continued, “Too much of the time they are just observing and are not able to do all of the job that they are going to be doing when they are actually in practice.” He believed that if preceptors would allow students to practice the skills they learn when they learn them that it would actually help them to retain the information and improve both their knowledge and their skills.

Similarly, Susie talked about the importance of mentorship through preceptors and how “they form a bond with somebody who they are already in the profession and get a lot of guidance that way.” She said that students need “to be but into situations where they are not necessarily in charge of the situation but to see how it will run for when they are in the same boat.”

**Summary.**

At the start of each interview, participants were asked to provide details on their educational experiences and how they became educators. They were then asked to comment on their current teaching philosophies in relations to those past experiences. At a later point in the interview, the participants were asked to discuss what they believed students were in need of the most in terms of their preparation for the profession. This idea linked back to the educators’ philosophies and the supports that are being provided to the students by the educators. This first
theme, *Knowledge & Experience...But a Lot of Experience* explored those philosophies, how the participants came to adopt them, and how the participants incorporate their philosophy into the support that they provide to the students in their learning experiences. Table 6 lists excerpts (in some cases abbreviated) from participant comments on how past educational experiences have reflected on their current teaching philosophies in athletic training.
Table 6

*Philosophies Influenced by Experiences*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Educational Experience</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerry</td>
<td>Internship Route</td>
<td>That’s where students are really going to see the real-world situation and it has to be paramount.</td>
</tr>
<tr>
<td>Jane</td>
<td>Internship Route</td>
<td>I think it has a huge influence, I think for me and for my students. So their clinical experience is extremely, extremely important.</td>
</tr>
<tr>
<td>Carlton</td>
<td>Internship Route</td>
<td>They can’t be a healthcare provider if they don’t have hands-on patient care and they can’t be the healthcare provider if they don’t have a solid knowledge base.</td>
</tr>
<tr>
<td>Whit</td>
<td>ATEP</td>
<td>Preceptors need to come into play and challenge students in everything they are doing and involve them.</td>
</tr>
<tr>
<td>Barbara</td>
<td>ATEP</td>
<td>So we do scenarios that are basically re-enacting emergency situations so the hands-on practicum part is huge.</td>
</tr>
<tr>
<td>Jane Doe</td>
<td>ATEP</td>
<td>It does a lot…I try to think back on the professors that mentored me…I try to guide my teaching and learning experience to that.</td>
</tr>
<tr>
<td>Steph</td>
<td>ATEP</td>
<td>The only way you can be a good athletic trainer is to have that drive, have an open mind, to have that motivation, to just throw yourself out there and not be afraid to make a mistake because that’s the only way you are going to learn.</td>
</tr>
<tr>
<td>Billy Bob</td>
<td>Internship Route</td>
<td>There is no substitute for experience.</td>
</tr>
<tr>
<td>Susie</td>
<td>ATEP</td>
<td>I loved my experience…I tried to take as much knowledge as I can from where I came from and apply to what I’m doing now.</td>
</tr>
<tr>
<td>Kay</td>
<td>ATEP</td>
<td>Clinically, I’m always referring to ways that I saw my preceptors doing things for their athletes…I was very influenced by my undergraduate education or am very influenced.</td>
</tr>
<tr>
<td>John</td>
<td>Internship Route</td>
<td>I’m able to slow down and explain things a little better than maybe we did in graduate school due to the fact that we only had a short amount of time so a lot of things were sped</td>
</tr>
<tr>
<td>Name</td>
<td>Route</td>
<td>Quote</td>
</tr>
<tr>
<td>-------</td>
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<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>CB</td>
<td>ATEP</td>
<td>I did get a lot of hands-on clinical experience that I think was a positive in my educational environment when I was a student and so I try to do that with our students.</td>
</tr>
<tr>
<td>Bill</td>
<td>Internship Route</td>
<td>I guess for me it wasn’t so much doing the research back then, it was just trying to make sense of all the different things that I was seeing, so it definitely influenced my thoughts on just being – the importance of students being very critical, logical thinkers.</td>
</tr>
<tr>
<td>Sharon</td>
<td>Internship Route</td>
<td>If you are out there long enough you are hoping you will gain the experience that you need. That’s kind of the internship model. Clinical experience needs to be more purposeful because we need to use the hours that are spent in the clinical setting wisely.</td>
</tr>
</tbody>
</table>

**An interesting kind of evolution.**

As mentioned previously in this manuscript, there was a time in which athletic training education had two routes to becoming a certified athletic trainer. There was the internship route and then there were curriculum programs in athletic training (a.k.a. ATEPs – Athletic Training Education Programs). Around the year 2006, it was mandated that all individuals seeking certification in athletic training must graduate from a curriculum program in order to sit for the Board of Certification (BOC) exam. Even though there has been this mandate, there is still a climate of professional discourse regarding how to move forward in creating the athletic trainer of the future. CB’s thoughts echoed this idea. He exclaimed:

I think we are asking our students to know more than what we had to know in 2004 and that would make sense because you have new discoveries, new treatments, new techniques, and so it is an interesting kind of evolution.

This theme explored a point of evolution in the field of athletic training education. The exploration of the theme began by examining participants’ views on how the process of
mandating the curriculum has affected the level of education that athletic training professionals are receiving. Next, this theme analyzed the concept of internships in athletic training and how they are being utilized in the educational process of students. This theme then presented a gap in the education that students are receiving in the current curriculum. Finally, this theme looked at what the participants’ views are regarding the future of athletic training education and the profession.

**The effects of the mandated curriculum.**

During the interview process, participants discussed their views regarding changes made within the curriculum and certification process over time. Although Carlton’s comment on the elimination of the internship route recalled:

> There were a lot of folks who had a lot of negative feelings towards that because they thought, you know, it was the only way to do that and that’s because they had been through that route and I think that is because they were a little more passionate about that side.

The majority of the participants felt as though the changes were either positive or they had mixed feelings about whether those changes were good or bad.

CB found it a little more difficult for him to answer than most. Despite the fact that he graduated around the time in which athletic training education was changing out of the internship route/model, his thoughts on the mandated curriculum remained positive. He related his thoughts to the curriculums that he has been involved with. He explained,

> I know the evidence-based practice has been a big change forced in the last couple of years and I know that going from the 1,500 competencies that students used to have to do in a curriculum model they have tried to narrow that down a little bit more but it is still a
large amount of information for a student to handle…It seems that obviously information is going to change. It seems that we are obviously adapting our education to evidence-based practice and that’s a big thing.

Jerry’s thoughts resonated with those of CB’s. He exclaimed, “The accreditation process has been a very healthy process” and he credited part of that to the differences made by the implementation of CAATE (Commission on Athletic Training Education). He explained, “we gave ourselves justice when we went to our own accrediting body instead of having to work under CAAHEP (Commission on Accreditation of Allied Health Education Programs).” This was a move that he felt gave “a little more autonomy of what we do in educating our students.”

Although his comments of “you only have two years” and “we have limited time with these students,” made it seem as though Jerry was a bit disappointed that the program he is involved with is only a two-year master’s program, he made up for that in saying and that “I am satisfied with what we are working with at the present time in educating our students.” Jerry concluded with thoughts that a third year for the entry-level master’s might be something to consider in the future.

Like Jerry, Jane graduated from an internship route. Similarly, her thoughts regarding the change were positive. Jane remarked:

It has been a huge change and although I really enjoyed my experience in the internship route, I understand why we really needed to buckle down and have a degree requirement – I think that’s important. I think that was a good move in regards to the profession. Jane’s remarks complimented Jerry’s in thinking that CAATE has made an impact on the education process. In regards to CAATE, she stated, “I think it does give us more weight to make us more of a recognized allied healthcare profession.”
Billy Bob not only shared thoughts with Jane and Jerry, but he too graduated from an internship route. He commented, “I think the coursework and the standards have certainly increased. I think the quality of course work around the country and in our program has increased.” He went on to talk about how much information there is now and how readily available it is made to the student versus when he was a student having to find information that did not exist in some cases. He continued, “the courses have increased both in number and in quality and in vigor and that’s good.”

Although CB, Susie, and Jane Doe all graduated from curriculum-based programs, they expressed positive thoughts that mirrored those of the others. Susie described the changes made by CAATE (Commission on Accreditation in Athletic Training Education) as:

They have really kind of stepped up our regulation – I don’t know how else to say that -- but, just, you know, making and giving us a better medical model and giving us a little less free rein in a good way, making sure everybody is doing the right, the ethical, or the legal thing and looking at state law, state practice acts and really try to harp on that type of thing.

However, like CB and Billy Bob, Jane Doe talked more about their thoughts surrounding actual curriculum changes and things that are now being implemented into the students’ education. Jane Doe noted:

I just feel like it is so detailed and organized, the curriculum and the opportunities that the students are getting to -- that are more thorough in some aspects and competencies in athletic training that they may not have gotten there before…I just feel that curriculum as a whole are becoming more detailed and more fine tuned and much more thorough,
which is great for the student because they are able to get a lot more information than they normally would have.

On the other hand, some felt torn in regards to how some of the changes have effected the overall education of emerging professionals. Again, it was interesting to see how the comments of those graduating from curriculum programs matched up to those who graduated from the internship route. For example, Whit, Kay, and Barbara all graduated from curriculum programs. Whit stated:

> When you graduate as an athletic trainer now, newly certified, just passed your entry level board of certification exam, you are essentially a master of none but you know a little about a lot. So we have a lot of breadth but not much depth in terms of our information, which I think is fortunate but I also think is unfortunate.

Kay argued that curriculum, in some ways, is hurting the education of the athletic trainer. “In all reality, I feel like our education has kind of gone downhill.” Although she was never involved in the internship route she feels as though working with people who did go through that route and hearing about their experiences made her believe:

> I think we need to go back to that, not full force, not completely get rid of education as a whole or athletic training education as a whole, but I think we need to be a little bit more clinical and a little less academic if that makes sense.

However, she also stated that she felt as though the increase in lecture time was a “great thing” and that she felt as though “students need that foundation.”

Barbara, on the other hand, discussed the impact that the world of medicine has had on the curriculum. She talked about how “having to have a definite general medicine background” has become a necessity and how teaching this information is necessary for students to have a
more “broad basis of general medicine.” She said that the knowledge surrounding medications is one area of the curriculum that “I think we might be missing a little bit.” She stated that her institution has started to spend more time in the curriculum on this area of focus. She explained:

Drugs and how they interact with systems, and that is medications as far as over-the-counter medications, medications that are street drugs…anything that could affect our student athletes, which we have a really high issue with that with our students, so our pharmaceutical classes are trying to narrow that down to how that affects student-athletes.

In addition, Barbara commented on how psychology has become a big part of athletic training education and how the need for both these types of classes within the curriculum has grown. She described that as being “really important, that definitely was lacking when I was in school year and years ago.” However, she went on to say how difficult it is now to get students “to have the work ethic and understanding of what athletic training holds.” She concluded with, “That’s a big thing that I’m finding with our graduate assistants that are coming in, they are not understanding the full aspect of what an athletic trainer is doing as far as time wise.”

Bill, having graduated from an internship route, commented on his frustrations with changes being made since the curriculum was mandated. He stated, “As a program director I get a little frustrated of how rapid the changes are. It seems like as soon as we are able to come up with a plan to meet the new expectations then the expectations changes, so that’s tough for us.” Having witnessed the change from the internship route to curriculum first hand, he stated that in regards to the overall education level “Certainly it’s improved.” He believed that changes made to the coursework had definitely helped but that “a bit of a negative is I think we are losing a lot of quality candidates because the expectations are so great compared to the quality of the job as
far as how much compensation athletic trainers get.” He further explained by saying that some students felt that “if I’m going to go through this much of an educational process then maybe I should be a physical therapist or a physician’s assistant where I can have more regular hours and better pay.”

Similar to Bill, Sharon graduated from the internship route. In regards to overall curriculum and education, she said “I feel as though the level of academic preparation has grown substantially because of the advent of the single route to certification, because of the growth of athletic training education programs.” However, Sharon had more mixed feelings in regards to clinical education and even though she understood why limitations were made to accommodate other needed areas of the curriculum, she commented, “I feel that in some cases we are limiting skill acquisition and mastery with some of the accredited requirements.” It could be speculated that these sentiments could have resulted from some of her personal learning experiences.

When asked about their thoughts on how changes in the curriculum have affected the way that athletic trainers are viewed in comparison to other healthcare professionals, participants expressed one of two thoughts, either that there is still a lack of respect for the professionals and the work that the profession entails or they were hopeful that things would continue to improve. Below is a description of the participants’ thoughts surrounding these two opinions.

“I don’t think they see it yet!” exclaimed Susie earnestly. Susie, along with other participants, expressed her frustrations with the fact that athletic trainers are not given enough credit for the jobs that they do. Although the participants’ reasons may have varied, they still felt as though athletic trainers were not gaining the respect that is deserved.

“I still believe that they think they are higher than what we are,” continued Susie. Although Susie’s comments were more directed towards how other professions such physical
therapy, occupational therapy, and physician’s assistants compare themselves to athletic trainers, Kay’s comments shed light on the thought that maybe our own profession is partly to blame.

“I think we are viewed as not knowing as much as we do,” said Kay. She went on to explain that she thinks it has to do with the education of the students. She remarked, “I think that the education side of athletic training needs to be a little bit more proactive in making sure our students are more aware of what the real life of an athletic trainer really is.”

However, Billy Bob agreed with Susie in thought that “we still have a ways to go in some cases to have the appropriate recognition by all people in all professions there.” He continued, “it’s still a lot of the situations where they don’t realize the total scope and ability of athletic trainers to take care of patients of all ages and also situations.” Similarly, Barbara stated, “they still don’t understand what we do.” However, both Billy Bob and Barbara felt that although there are others who do not understand what athletic training is, the medical professionals and coaches that they work with on a daily basis have a clear understanding and appreciation for what they do.

Carlton, John, Steph, Whit, and Bill all commented on the stigma of the profession in the past and how difficult it has been to break that stigma. Carlton’s stated, “I feel we are far off.” He related the problem to how athletic training professionals are allowing themselves to be viewed and are conducting themselves professionally. He commented on how that view is sometimes obscured in that the role of the athletic trainer is seen as being similar to that of another. For example, he related athletic trainers to being seen as coaches.

I think we get stuck in using or wearing the – I will say the old coaching mistaken pants, you know I think that sometimes we’re seen in that sense and we are not that anymore and we’ve got to move past that.
However, John saw the changes as a way of trying to align the profession in a manner that is more similar to other healthcare fields. He believed that the changes were being made “so that we may be looked upon by the layperson as more of a healthcare provider rather than somebody who is just giving water or a glorified equipment manager or something like that.”

Steph’s comments surrounding the stigma were based on the need to educate others about athletic training. She said, “A lot of people don’t know what athletic training is. They think we are personal trainers, they think we work at gyms.” Whit continued with related remarks when he said:

I think we are doing better, I just think that what we were doing in the past has set us up that other healthcare professions and the lay public understand us as the trainer that knows how to tape ankles or maybe train people how to get better or manage the acute stuff.

Similarly, Bill commented, “I still think that athletic trainers oftentimes are viewed for their clinical work which sometimes involves a lot of filling water coolers and running water as opposed to viewed based on the really challenging classes.”

On the other hand, there were some participants who believed that the changes have had some positive effects and they saw the view of the profession as continuing to get better as continued efforts are made in education. For example, Jerry said, “I think we are moving in the right direction.” His thoughts are tied to the continued improvements in education and the opportunities for advanced degrees such as the entry-level master’s program that he is involved with.

As mentioned earlier, Jane remarked on the involvement of CAATE and how “it gives us more weight to make us more of a recognized allied healthcare profession.” However, she did
express how she thought continued focus on our profession should be a priority. She commented, “We have been chasing what other professions are doing as opposed to being good at what we do as a profession.”

CB and Jane Doe both talked about the intensity of the curriculum and how it has helped to make for better clinicians. Jane Doe said, “the route it is taking should continue to help athletic trainers to be viewed more equally in the healthcare profession as a whole.” Whereas, CB talked about the incorporation of evidence-based practice in the curriculum and how that may help in how they are viewed. He said:

“I think at some point it is going to be a positive change just because everyone else does it so it is kind of something where we weren’t doing it so maybe we weren’t as sophisticated as we should be.

“It is interesting to see the dynamics of each program and how different universities kind of tailor it to be their own,” uttered Jane Doe. This remark was made when she was asked to discuss her thoughts regarding any variances seen in how the CAATE standards and recommended guidelines are being interpreted amongst different institutions. The majority of the other participants, when asked the same question, agreed that there are still differences from program to program.

In fact, many of the participants believed the variance to be most commonly related to the institution in which their program existed and the restrictions that were associated. For example, Billy Bob stated, “I think there is a definite increase in the variability.” He continued, “I think there is much more of an opportunity for variability in programs to do what they think is best.”

Bill, Jane, and Jane Doe all talked about the coursework. Bill stated, “I really do think there is a great deal of leeway and some of it is based on resources.” He said that some
institutions do not have the resources to have a large number of athletic training specific courses. Whereas, Jane commented, “I think there is a huge variance. I mean, I have experience as a site visitor so I can tell you what I have seen and some institutions place a lot of emphasis on clinical experience and some don’t.” Similarly, Jane Doe asserted:

Oh yeah. I mean, in the three universities I have been at, you know, the core values are the same, the core principles, but, you know, there is differences in, you know, certain times they take, what or how certain classes are broken up, but I do think there are differences, but obviously with CAATE and the accreditation, you know, there are standards that everyone has to have, and so I’ve seen that across the boards.

On the other hand, Sharon said, “in general there are more similarities than there are differences.” John agreed with Sharon in his remark, “a lot of them mirror the same but it all really has to do with as long as the main focus stays the same there are a few differences on just depending on program directors and where they feel their students are lacking or things like.”

However, Sharon elaborated, “that is somewhat driven by accreditation standards. It is also driven by, you know, probably tradition.” A tradition, that she described as being relative to the programs and the course structure based on semester of study. She also said “I think it varies so much between institutions and what institutional rules and regulations allow.” She continued, “I have seen some fairly creative programs.”

CB and Carlton agreed that the amount of variance “depends on the school,” and the administration involved with the curriculum. Carlton talked about the structure of the program and how it is based on “what the programs or what the institutions will do.” He went on to say “there are some institutions that require all students in a degree program to have some type of service-based learning component or internship-type of experience” and that “it goes back to
whether or not that fits into it,” meaning the program itself. However, CB did state that in a study he and a colleague had done, they found “a large percentage of the programs are following the same curriculum model.”

Steph’s thoughts resembled those of CB and Carlton. She stated, “I’ve seen a lot of changes that’s all dependent upon the program itself.” She explained that her old institution focused more on education whereas her current institution is a “little bit more clinical, more hands-on, and their book portion is not as prominent.” She continued,

It depends on what or where you go, how much they focus on one aspect to the other. I mean, you are going to learn different aspects from different places and it all depends upon who you have teaching you.

Whit and Kay talked about the implementation of CAATE standards and how that impacts variance among programs. Whit said that although the CAATE standards are across the board, in regards to clinical experiences, “you have some programs doing everything by the book and I think you have some programs that are doing the opposite and basically pulling themselves away and saying we don’t have anything to do with it.” Similarly, Kay uttered, “well, we all get the same proficiencies that CAATE requires us to do, but I think it’s completely different.” She described all three programs that she has been involved with as being very different and that “the information is the same but it is not getting taught the same.”

Barbara commented on how her varied experience has left her a clear understanding of how different programs can be. Having gone to a program that lost its accreditation shortly after she was there and then returning to her alma mater, she said “I have gone to the worst of the worst and now I came back to probably one of the better programs that basically is not having that divide of athletic to academics.”
Jerry spoke passionately on how his program tries to optimize the clinical education aspect of his program by making good use of the time that they have. “Trying to be the ultimate caregiver, you know, sometimes is unnecessary given the nature of a traditional setting,” Jerry exclaimed, capturing the essence of his undergraduate experience. He continued, “too many hours of working as an athletic trainer is not needed and working many, many hours, you know, sometimes is overkill in terms of the educational process.” Although this varies from Jerry’s experience in having graduated from an internship route, it may not be very far off from what some other programs are currently doing. Jerry’s comments surrounding the potential for programs to be different seemed to vary from that of the others though. He stated, “I see a lot more consistency than there has been in the past.”

Jerry and Susie seemed to be the exceptions to the rule in this case. They both thought that there were not many differences present in the current curriculum. In fact, Susie’s comments resembled that of Jerry’s. She explained:

I think the general core is the same because we are all getting the same competencies covered. The set-up is a little different here and there, but in general, from what I have seen, they are getting the same information.

Regardless of whether or not the participants thought there were any differences amongst the programs, most agreed that there was still something missing in terms of the education that the students received. This notion was explored in the participants’ comments on how curriculum changes have affected students’ preparation for real-life scenarios of the profession. Many of the sentiments that were made rang in my head as I read through the participants’ thoughts. However, none did more so that those made by Carlton.
“You can make someone smarter, but you can’t undo stupid!” Carlton was referring to idea that you can teach the book and the process, and what we do as athletic trainers, but in the end there are some things that cannot be taught. Carlton said, “It’s about learning to work with people.” This was a part of students’ education that he described as not being found in a book. He referred to this theory as “Work Force 101,” and he went on to say, “One of the things that the clinical experiences do is learning how to communicate, learning how to be involved in a dynamic, and work with different individuals.” He continued, “No one cares how smart somebody is. They do, but passing the board exam is – graduating from a graduate program and passing a board exam is the smart part. How you don’t do something stupid is the clinical side.” Like Carlton, Steph was adamant in her thoughts that the programs provide you with the “foundation of knowledge” that is needed to do the job. However, she said “it is the clinical aspects and those internships that really prepare you for making those life decisions and being able to react to a specific situation.”

Kay’s comments also reflected Carlton’s. She also described the curriculum as giving the students the core foundation but that “it still isn’t enough.” She said, “I think that it’s unfortunate that they are restricted in their clinical hours.” Although she felt that its necessary to obtain the foundational skills needed, she said:

I think there needs to be a direct correlation in the amount of proficiencies or skill sets or whatever you want to call them. The amount that they have to get needs to be congruent with the amount of hours that they are mandated to do within the clinic, and that’s truly where it’s going to come from.

Kay said that in a “perfect world” the scenarios given and the hours worked by the student would give them everything that they needed but that it was not the case. She recalled conversations
with students who graduated that came back and said “Man, I wish you would have taught me more about this” or “Man, I wish I would have learned about this.” She said that an educator is left feeling somewhat guilty as a result because of all the time that was spent and that it still was not enough to teach them everything that they needed to know.

Bill, similar to Carlton and Kay, “I don’t think students prepare enough for the hands-on skills that they are ultimately going to need because the exam is just all questions answered on the computer.” He talked about how changes in the way the certification or BOC exam have dictated the way that some programs are preparing their students. He went on talk about how difficult it is for programs to understand exactly what CAATE expects from the clinical integrated proficiencies and that until everyone is on the same page, there will always be differences in the way students are prepared.

Jane Doe expressed her thoughts on how students do no learn everything until they actually experience it. She said:

I think a part of it is you don’t know how to handle a medical emergency, you can prepare for it, but until you actually see one it is different than just learning how to do it and going through a mock scenario.

Like Kay, Carlton, and Bill, Jane Doe explained how limitations in what students can and cannot do often hinder this aspect of learning.

Barbara’s comments reinforced those of Jane Doe in that students just were not going to learn as much until they were in the situations themselves. She talked about her experiences with graduate assistants that are hired to work with their program. Specifically, she said, “They are not used to having to deal with stress of a student-athlete.” As a result of the variance in programs, she continued:
If their program is a very small snapshot and they are changing every three or four weeks, they are having to take a little bit more time to get to know their athletes that they might have for a whole year somewhere else.

She felt as though this was especially true in regards to the internship level where a person is hired for one sport.

Similar to Barbara, Sharon said that students are hoping that “if you are out there long enough you are hoping you will gain the experience you need.” However, she questions how many hours does it take for that to be accomplished. She said making the best use of their time is the ideal way for that to be accomplished. On the other hand, Jerry said, “It is highly program dependent.” His thoughts were similar to Sharon’s in that “maximizing teachable moments” would provide the best learning opportunity for this goal to be reached.

CB mirrored the thoughts of Jerry in that “it depends on the curriculum.” However, he did say that the more advanced educational techniques were used the better off the curriculum would be. He said that it is difficult to expose students to everything and that it is the intention of the program that he works with to try “our best to make them an entry level practitioner to provide basic levels of care in the hope or the understanding that when they go to their first job experiences that’s when they are going to start accruing more experience to be able to provide advance levels of care.”

Billy Bob commented that he thought students needed to get more exposure to other healthcare professions so they could better understand the concept of a “team of providers taking care of patients.” However, he said “it is a challenge in some places that may not have multiple healthcare professions in their program.” Whereas, Jane said that one of her big concerns
regarding students is “when you get away from the wing of the certified athletic trainer who has been directly supervising you, will you be able to do things completely on your own.”

Others, like John, Whit, and Susie, talked about how they do not see any major changes because of the curriculum based mandate on what their programs are doing. John said:

We try to expose our students to as much as we possibly can so any real-life situation that we have come up or we have another sport has something happen and a particular student or a group of students is not assigned to that sport they are more than welcome to come and look and if we have a torn ACL there, they can come over and do a Lachman’s and feel what a positive Lachman’s feels like.

Susie said that the feedback that they have received on former students who have graduated has all been positive in regards to their having been prepared for the job. She said, “I think how our curriculum is running we are very much preparing our students in the real world. I think we are creating very good hands-on athletic trainers because we have all of that clinical contact time, too.” Whereas, Whit simply remarked, “I don’t really see that it changes much in terms of their preparation to enter the work force or enter clinical outside of training practice."

**Required internships in athletic training – Are they the answer?**

Currently, in the curriculum of athletic training, internships are not required. In some instances, there are institutions that are supportive of students taking the initiative to go outside the confines of the curriculum and seek out these types of learning experiences. There are others that argue the current curriculum is providing ample internship type learning experiences within the off-site clinical rotations that are offered in their ATEP. Regardless of how the word internship is being interpreted amongst programs, it was apparent throughout the participants’ interviews that internships and the experience gained from these learning experiences can play
an important role in the overall education of athletic training students. This portion of the larger theme, *Knowledge & Experience...But a Lot of Experience*, will explore how ATEPs are utilizing internships for skill development by looking at how out-of-class experiences contributed to persistence in the field of athletic training and the typical expectations that students have regarding these experiences.

Jerry termed internships as the “hallmark of learning.” Without hesitation, it was a reply that he made when asked to discuss his thoughts on how internships are contributing to the persistence of students in the field of athletic training. Jerry went on to explain how a student, when put in a scenario in which their skills were tested, can have an invaluable experience that heavily weighs on their persistence.

Whit agreed with Jerry. He said “students like the challenge.” He talked about how students can utilize these opportunities to learn how different settings require different things and “where some of the stuff you do in high school doesn’t really apply to college; some of the stuff you do within a clinic doesn’t really apply to college, same thing or even high school.” He said, “I think they appreciate it because they get the full flavor of the deal.” Similarly, Jane Doe said, “I think it’s great that the students have internships. It gives them another perspective.” She went on:

I think it is great for them to meet new people, see a different setting, whether it be, “Oh, yeah, I do like this” or “Oh, maybe this isn’t for me.” It just gives them another experience or another opportunity to see, you know, different avenues of athletic trainers and meet new people, see how they do things, add skills to their skill set so I do think it is beneficial.
Jane’s comments on how these experiences make students self-evaluate mimicked some of the thoughts expressed by Jane Doe. She commented:

It makes them determine No. 1, is this the kind of setting that I see myself being in long term, and No. 2, I think it helps them solidify that this is the major for them, you know, that this is the profession for them before they go on and pursue a master’s degree and things like that.

Jane went on to discuss how students’ varied experiences helped them to realize what kind of athletic trainer they wanted to be. She explained that some students were adamant that they did not want to work in a particular setting but that once they were placed in that setting they realized that they really did want to be there.

Susie and Bill both remarked on how enthusiastic students seemed about their overall experience. Susie said that her students “come back and they are fired up and they want to share what they have learned.” Likewise, Bill said, “I do think all of those experiences are well received by the students and when we ask them which experience they enjoy the best and they feel like they get the most out of it is typically those done off campus.”

Barbara and John talked about how it is helpful for students to utilize internships early on to determine whether or not athletic training is the right field for them. Barbara said their program uses observation hours in the initial screening of students who want to enter the program. She said, “Our students know from early on that they want to do this.” On the other hand, John related to his personal experience when he said, “there is no doubt that’s what happened with me. I am sure it’s happened with others.” He talked about how his internship experience in physical therapy early on helped him to realize that athletic training was what he wanted to do.
Kay talked about how students “get more – when they have the opportunity to take what they have learned and put it into a real situation, not just the scenarios that we throw at them in class or we teach them from the book, they actually see it in real life and get to experience it in real life, I think that’s what’s really stuck into their brain and makes it a real thing.” Sharon shared those thoughts when she talked about how athletic training students would rather be in the clinic setting versus the classroom. She said, “They can’t wait to be where they can, you know, practice, apply the knowledge of skills they have been learning, and you know, to be in the setting that they are passionate about.”

On the other hand, CB talked about how these experiences can be good or bad situations. He described the “good” in regards to an injury or seeing something new. He said “it kind of energizes them or gets them invigorated about the program or the curriculum or they see something that applies to what they learn in class so they start making connections.” He described the “bad” as having the student put in a situation in which they are not psychologically prepared, like a “horrific injury or you witness a death or things like that.”

Billy Bob and Carlton said, that although their programs do not have a required internship, both strongly encourage the option to participate in these types of experiences. Billy Bob said, “It’s been a very positive thing.” He continued, “students come back to our campus and present what they did to the rest of our students and I think the rest of our students like to hear it.” Regardless of the fact that internships are not required at his institution, Billy Bob said “we are seriously considering trying to figure out a way that we can add a required internship into our course work.”

Like Billy Bob, Carlton said, “we encourage them to do that. It helps them build their resume, but it also builds relationships. It is not networking, it is relationship building.” He said
that the program he works with incorporates experiences such as marathon races and event coverage and “it provides a different experience for them and it gives them an opportunity outside the conventional setting.” He went on to talk about how they have had interns from other schools and how “we have hired some of them before because they are good and after the fact or we get them as grad assistants.”

However, there is always an exception to the rule. Steph was the exception in thinking that the coursework was more related to students’ persistence and how it often weeded out students from the programs and from the profession. She stated:

I think it is more the education that they realize they’re suited for the profession and not because they just can’t handle the course load. And they realize maybe that the information or what you are supposed to be doing is not what they thought it was and they just think that the clinical might have kept them there a little bit longer than they should have been because they think it is more fun – well, it is fun, it is just maybe not their kind of fun.

In most cases, the participants seemed to believe that students see internship experiences as a way to prepare for their future in the field of athletic training. Whit described students’ internships as “geared towards what they want to do in the future.” His comments were not unlike many of the other participants. When asked about what some of the typical expectations of students were in regards to internship experiences, there were two common answers among participants. These most common answers were that they did it for benefit in the future, as Whit insinuated, or they wanted more time in the clinical aspect of the profession to gain more experience.
Participants such as Susie, Whit, John, and Jane Doe all made similar remarks in regards to students wanting to use internships for some sort of benefit to them in the future. Susie said, “I think they are expecting a job later.” She talked about how many of their students typically seek these types of experiences between their junior and senior years in school, and “go somewhere else and see and prove what they know and learn something while they do it.” She commented on how some of their students do internships in the NFL (National Football League) to see if that is what they really want to do or to make connections for when they are able to work at that level in the future. Whit’s thoughts mimicked that of Susie’s in terms of some students want the NFL specific or professional sport specific experiences. This is something that he keeps in mind when making clinical site assignments.

John talked about one of his classmates taking an internship one summer while she was in school. He explained, “That’s when she made the decision on what area she wanted to work in.” He then recalled two other students that did a “summer internship with professional baseball and they both fell in love with that and kind of their job search or whatever it may be to that area.” Lastly, Jane Doe talked about how her students have used internships for networking. She said, “I just think of a lot of the male undergraduate students that I worked with or who were my classmates and stuff, they would do the NFL internship because they thought they wanted to work in – with college football or NFL.”

Other participants such as CB, Kay, Billy Bob, and Bill all commented on how their students hoped to gain more experience out of the internship experiences. In these remarks, it was interesting to see similar trends on an institutional level as well. For example, CB and Bill both talked about how their students want the opportunity to apply what they have learned in an
actual work related setting. Whereas, Kay and Billy Bob both talked about the idea of the “new” experience that it provided for their students.

CB said his students have an awareness of what they are learning in these experiences and that “our students really have the expectation they are not just going to be a work force they are actually going to learn something at their clinical experience.” He said that this was an opportune time for them to be mentored to and not ignored.

Like CB, Bill said, “I think they are really just looking for an opportunity to have more involvement with the actual care of their patients.” He said that because of the number of students in their program and the amount of supervision that the students are given that “they are just not allowed to do much more than, you know observe the more challenging activities and then participate in the less challenging like pre-event taping and those type of things.” He went on to say that the internship experiences usually allow for more one-on-one or one-on-two mentor to student ratios.

Kay replied, “I think the chance to get hands-on, a chance to have a little bit more freedom.” She explained that many of the students are attracted to this type of experience because of the “fresh take on things” that it can provide. Similarly, Billy Bob stated that his students are hoping to gain a different viewpoint than what they had. He continued by saying that, in some cases, these experiences have “opened their eyes to some things and many things that maybe they didn’t expect to see.”

Without getting feedback for the students, the educators would have no real way of truly knowing what type of experience that the students have in these types of learning environments. With that in mind, the participants were asked to talk about some of the feedback received from
students regarding the internship experiences that they have been exposed to. When asked, most all of the participants said that the feedback that they received was positive.

Jerry had no hesitation with his answer of “Oh, yeah. Great experience, a hands-on opportunity to supervise, able to make didactic decisions under the supervision of an ATC.” Similarly, Susie spoke of how the students “absolutely love them.” She said, “they very much value that experience and they use it.” She went on to explain how students share what they have learned with other students and how “they do kind of get fired up and it starts their brain thinking.”

John said, “As far as I can tell most have been very positive feedback.” He said the students who participate in these experiences are “the ones that are very passionate about and already know that athletic training is exactly what they want to do.” Jane Doe reiterated, “I truthfully always heard positive experiences from the internships from classmates, friends, some colleagues, and students.” She could not recall any negative feedback from any of the experiences that she has been involved with unless it was in the form of “Okay. You know, like I always thought the NFL was for me” or “A high-end college team was for me,” but she said that some students realized after the internship that it was not about “the glitz and the glamor,” but rather it was the work that they really enjoyed.

Kay could not recall any students “that have come away from an internship with negative thoughts on the experience they had.” She said, “They are all very thankful that they have had that opportunity to see different settings and to see or to get new information.” Billy Bob agreed, “The students have been appreciative. They thought it was great.” He went on to explain how their students are required to give a presentation, “a comparison of that internship and the things
they did there versus the clinical responsibilities at our institution.” He said that has always been helpful to him and his staff.

Sharon spoke of how they have knowledge of some internship sites before they send students to them and that because of others past experiences “those have all been positive because we know they are going to be positive before we recommend a student to do them.” Likewise, CB said, “By and large they are positive.” As Sharon did, CB talked about the relationship between the student and the preceptor and how a good fit in regards to personality can have “a pretty positive effect on the clinical experiences.”

Sharon also said that in other cases in which they do not know much about the site, “we have a variety of different responses.” Whit agreed with Sharon on the variance in responses. He said that some students fill out a scoring rubric to help them determine what type of experience they had, and others just tell them about their experience. He explained how students typically respond with “it was a great experience or, you know, it was a bad experience or here are the pluses and here are the minuses.”

Jane’s remarks resembled that of Sharon’s and Whit’s. She uttered, “I would say 95 percent of them thought it was awesome.” However, she went on, “there is always one in every group that wasn’t happy for some reason.” She said those reasons varied anywhere from location, living situation, or feeling like they were secluded or not having anyone to be friends with.

Bill, on the other hand, said that his students “oftentimes they don’t really offer the feedback.” He said that unless they asked questions, the students do not always tell them about their experience. However, “when we ask them which experience was the most rewarding or where you learn the most they typically do say it is the internship settings.”
Another aspect of the students’ internship experiences that seemed to be positive was the way in which internship experiences influenced the students’ preparation for the profession. For example, Bill spoke of “one of the things that’s missing or seems to be missing is that students don’t get enough hands-on.” He went on to explain, “I think the idea of internships is a good thing but at the same time I think that in almost every profession there is an awful lot of learning that occurs once you start working.”

Jerry, when asked his thoughts on the level of influence, said, “Oh, immensely, because it really gives them hands-on opportunity dealing with situation that are appropriate. I mean, which is really what we are looking for in an experience.” Similarly Bill said, “It really gives them hands-on opportunity dealing with situations that are appropriate.”

CB described these experiences as “one of the things that gets them ready for their first job as far as going out into the profession.” Both CB and Susie described athletic training students as “kinesthetic learners” and how they learn best from these types of hands-on experiences. Susie explained:

They are getting more prepared by being again completely immersed in that clinical site; they are seeing how other places do it; they are getting more connections, more professional connections; they are getting to work with different types of clientele.

She said that their program tries to accomplish some of this by exposing them to different patient types.

Carlton described internships as not being a “deal breaker” but rather a “deal maker” in that it could help the student in a way that “they may move to another job down the line or they may get hired on as a graduate assistant or something along those lines.” He said that it is “another experience” and that “folks vouch for it and it is good.” Jane Doe, like Carlton, said, “it
gives them another opportunity and hours and times to practice what they are learning within
their curriculum and to just get the exposure of more injuries, of more rehabs, of more
modalities.” She continued:

I guess it does influence them to be ready for the profession in the sense that they just got
a whole other set of exposure to the things I listed like taping and rehab and injury
exposure and injury evaluation, even if they are not doing, they are learning about it.

Sharon, like Jane Doe, talked about how the internships help to provide more experience
for those who need it. She said, “I think especially for students who really need that kind of
bridge year I think it is tremendously helpful.” Likewise, Jane said, “I think they are better
prepared to hit the ground running.” She continued with “They don’t have that shock of, “Oh, I
am here by myself anymore.” They are ready. They know what their job expectations are and
they hit the ground at full go.”

Billy Bob related his thoughts on his students’ experiences that are “usually done very
near the end of their time at our program.” He described the experiences as “really eye opening
to the students and they have a much greater appreciation of it rather than something you can just
talk about in class.” He continued, “they come back and they are more attuned to what they need
to study for and be prepared for.” Like Billy Bob, Kay talked about how students who do their
internships while still in their program. She spoke of how “they always come back from that
experience with a lot more drive and a lot more passion for the profession.” She went on to say,
“They are always the ones that step up in the clinics, they are always the ones that treat the
athletes like they were their own athletes.” She said this type of student is “the golden student”
that you want in your program.
Similarly, Whit referred to these students as “an expert within our program given the niche that they were studying per se within their internship.” He said the overall experience was “enormously positive.” He said that this was a result of the fact that the students “were given contact and connection and expertise that the program itself probably would not have offered.”

John described these experiences as “preparing our student to interact with other healthcare fields whether that may be MTs (massage therapists) or PTs (physical therapists) or whatever.” He said that working with these other professions in these types of experiences that “your knowledge base of what they do and what they are responsible for is a lot higher.” As a result he said, “Your communication skills with them will be that much better.”

*Bridging the “gap.”*

In his interview, Carlton talked about how “there was a big gap in my knowledge base” and because of that he felt the need to continue his education by attending another institution, taking additional courses, and gaining more experience. He described this “gap” as a result of coming from the former internship route of athletic training education. However, in the countless hours of scouring the pages of these interviews, I too saw a “gap” in the education of athletic trainers and it was one that lies present within the current curriculum.

Through the rich descriptions provided by participants, this theme will explore the “gap” in the education that students are receiving in today’s curriculum. A connection will be made with participant comments related to what was seen as being needed most in terms of their preparation for a profession in athletic training (as mentioned in an earlier section of this chapter) and what they believed to be the next step in the education process for students that are preparing for the profession. Participant comments regarding that “next step” are described in the section that follows.
Carlton looked at athletic training education as “building a good foundation.” He said, “It is like building a house, if you don’t have a good foundation, you are not going to build a good house or building, whatever it is, so you have to recognize what the limitations of that are.” He went on to say that experience helps to build on that “foundation.” The majority of the participants, when asked, agreed that internships or some type of continued hands-on experience would be beneficial to students wanting to gain more in their education and preparation for the profession. This idea is further explained in the following comments that were made by the participants.

Sharon explained that she thought that internship experience was the next step. She responded:

I think a quality internship at a setting that a student wants to pursue their career in, that is going to be potentially advantageous to any student but I think more so the internship and perhaps a residency can be most beneficial to a student who lacks experience coming into an entry-level master’s program.

She went on to explain that the internship should help them prepare to get a full-time position the following year and that continued education following that would be in their best interest in order to be successful.

Similar to Sharon, Whit talked about how internships can be used in a way that allows students to get much needed experience. Experiences that Whit thought were important and that people do gain a lot from. He said, “It serves for the student to get clinical experience, which is vastly important, develop connections and other potential references.” Regardless, Whit thinks it would be best if we move away from the traditional sense of internship in thinking “we get cheap help for the grunt work that we don’t want to do for summer camps,” and move towards “If we
had an intern, we could supervise them and we are helping the profession in the future because we are really developing somebody and mentoring them.”

Jerry and Billy Bob shared thoughts that making an internship a required experience might be the answer to improving the students’ education. Billy Bob said “some type of formal required internship” is something that he sees becoming more prominent. Whereas Jerry, on the other hand, suggested that the next step should be “maybe a year internship that is part of the program before they sit for the boards.” He suggested it might be best to have that as a requirement for the first thing that students have to do after they graduate.

Similarly, Kay and Billy Bob’s remarks resembled one another. Kay commented, “I think internship is a good way of preparation” and that “making it a requirement is a good way of preparation.” Their comments continued to mirror one another as they discussed the idea that working with different groups of people would be beneficial to learning. On the one hand, Billy Bob explained that experience “should increase to get a higher level of time being in a situation that specializes in a certain segment of patient population.” Kay, on the other hand, talked more about how hands-on experiences and dealing with various groups of people was a good way to prepare for the “real world.”

Bill talked about how he thought it best that “students need to learn on-the-job.” He explained, “I think the idea of internships is a good thing but at the same time, I think that in almost every profession, there is an awful lot of learning that occurs once you start working. An experience that he believed can be done with the help of others or on your own. He continued, “I learned more about athletic training my first year as a professor than I did in all of the years that I devoted to my education.”
In contrast, Steph focused her comments more on the location of the experiences. She remarked, “I really do think they need to get away and they need to experience athletic training in different regions because you need to know if you can handle situations without that safety net.” She said that students need to “take the initiative to push themselves out of the comfort zone” so they will know how good of an athletic trainer they can be.

John, Jane, and Barbara all talked about taking another year to work under the tutelage of another certified athletic trainer. John’s thoughts on the next step leaned towards giving the person “another extra year of nothing but clinical work.” He believed it would be beneficial to students because “you can build your opinions and your ways of doing things a lot more and a lot better before you have to go out and actually do it on your own.” He described this as being either an internship, a step before a graduate assistantship, or maybe even something after the person has become certified.

Jane talked specifically about graduate assistantships. She said “that having or working as an assistant or working under somebody is the best route to take, you know, after they graduate from an undergraduate program.” She talked about the importance of mentorship and how it helps for the person to gain experience yet “still have someone to lean on for guidance.” Similarly, Barbara said that a “two-year graduate assistantship or an internship” would be helpful for the student to continue to learn.

Out of all of the participants, Susie was unsure the most about her thoughts regarding the next step. She said she finds herself searching for “different people’s experiences” because she is young and does not have as much of her own to rely on. “I’m just trying to see how other people do it.” Although she does believe students to be prepared, she is uncertain that they are as prepared as they could be. She said, “that just comes with more and more experience” and that
“hands-on clinical experience is going to be the optimal thing.” Her uncertainties in her thoughts lie with what method would be best to do that, required internships or fellowships, she just did not know.

**Athletic trainers of the future.**

In regards to the future of athletic training and ATEPs, the participants were asked to express their thoughts surrounding potential possibilities that may be in store for the profession and its professionals. The result was two types of commonalities. One idea being, a new type of degree has been suggested in order to help gain the long overdue status and respect sought out in the healthcare world. Another idea being, there may be a change in the way that athletic trainers are viewed as a result of this new degree. This subtheme revealed commonalities surrounding the participants’ thoughts in regards to foreseen changes in the curriculum and foreseen changes in the way that they profession and its professionals are being viewed. This section will explore these two types of commonalities.

*A new type of degree.*

“I think the big hot topic now is entry-level master’s.” Kay quickly replied when asked for her thoughts on changes foreseen in the curriculum of athletic training. The notion of mandating an Entry-Level Master’s Degree (ELM) as the new standard for degree requirement in athletic training was the most popular answer given by participants. Indeed, it was a “hot topic” amongst the participants throughout their interviews. For the most part, this change was something that was seen as a potential change in the near future amongst the majority of the participants.

CB heard about the potential degree change at the educators’ conference and said that this was “an interesting proposal for the summer because they had talked about they need a lot more
research to be done to make decisions like that.” This was a decision that he felt “is going to affect every program potentially in the country.”

Jane Doe and Susie saw the ELM as being something that might occur “down the road.” Jane Doe said that she saw it as a means “to get future professionals and athletic training clinicians more prepared to become, you know, an athletic trainer.” Although Steph agreed with Jane Doe in her remarks that the potential change was intended “to make this profession more prominent,” she saw the change as one that might happen sooner than later.

Billy Bob remarked, “there is a huge discussion and a lot of controversy right now as we speak about the professional degree.” He saw it as a decision that “will be made some time this calendar year.” He described this decision as having “huge impacts, especially if it is to more to the master’s only.” However, he said “one of the advantages is it give the students the chance to work on nothing but their course work” and for curriculum to potentially be more “concentrated” in regards to clinical work. He insinuated that this change may result in students who are “going to be more serious and more mature and you have students that are tuned in more” than those he described as being found at the undergraduate level. He concluded, “There are lots of pluses and minuses both ways.”

Carlton agreed, “There are some pros and cons to both of them.” Like Billy Bob, Carlton said the students “are going to be more mature and which definitely helps versus dealing with an immature student or a less mature student coming one year out of college and one year in college and going in to the program.” Similar to a comment made by CB, Carlton said, “there is not enough evidence to show, in my opinion, that one student is better than the other just because they have a higher degree or not.” Although Billy Bob, Carlton, and CB may have seemed a bit
skeptical, there were some, like Jerry, that were all for the “elimination of the undergrad,” most likely because he was already a part of an ELM.

On the other hand, there were some who thought the ELM “is a terrible idea.” Bill said, “I understand the rationale that we want to be more respected and we want to be treated more like professions like physical therapy.” However, he described this “radical change” as one that “is going to be very, very difficult and it’s going to disrupt everything.” He went on to talk about how it will change the presence of the graduate assistantships and how so many institutions are “ill equipped for graduate programs.” He continued, “I think though if you just allow programs to do it if it works for them, what you will end up having is you would have enough entry level master’s programs that it would improve things.”

Like Bill and Billy Bob, Sharon also saw this potential change as on of great impact. She commented, “That will have tremendous ramifications for athletic training and that will cause a lot of ripple.” She went on to discuss all of the changes that would have to be made as a result. Changes that Sharon said would occur not only to the education of athletic trainers but also “work force changes, recruitment changes, employment change, employer attitude change.” She concluded with “it will have a fairly large affect on athletic training as a whole.”

John, Kay, Bill, and Steph all described the potential degree change as one that would be similar to that of “physical therapy.” John said “I think it’s headed in that direction just because athletic training has kind of always been seen as such a young profession and is kind of a step back behind all of the other likeable professions.” He believed “athletic training is going to follow suit and have to move to that master’s program or whatever it may be in the future.”

Jane and Barbara talked about the possibility of curriculum changing to become “more in depth” and “specialized.” Jane said, “I think what you are going to start seeing is going to be
areas of distinction.” She further explained that emphasis in education would be based on interests. She also said “I think its is going to be very interesting” when she brought up the possibility of the entry-level master’s program. She went on to say “I have my beliefs on what I would like to see happen, but, you know, I don’t know what will actually happen.” Barbara talked more about “mainstream general medicine” and the implementation of how to deal with issues “that is affecting our student athletes outside the field that we still have to deal with.” She said she has already seen some changes being made in that direction.

A new type of athletic trainer.

After considering the potential changes in the curriculum, it was only natural for the participants to talk about how they saw these changes affecting the way that the profession of athletic training and its professionals would be viewed. CB commented, “there are different theories that moving to a master’s program would potentially give us more credibility in the medical community.” He said that this was relative to the fact that “other medical professions are at a master’s program or above as far as educational level.” However, he said that from what he knew there was no data to support that implication.

Sharon said, “It depends upon whom you are asking.” She said that it might not make a difference to the patient population and other individuals of the sports medicine team because they already understand the job that athletic trainers do and “they care much more about the job and what the person has shown to be able to do.” As far as other allied health professionals and government agencies, Sharon said the view could definitely change.

Jane Doe remarked, “I think that the profession as a whole is diligently working forward and progressing our kind of images, you know, with allied healthcare professionals and being viewed as that way.” She continued by saying that she thought the entry-level master’s level
program may help that. Carlton agreed with Jane Doe. He described the role of the athletic trainer as becoming “evermore important” because “we are growing as a mid-level practitioner.” Like Carlton, Jerry talked about the possibility of being “utilized in different settings” to work in the workforce.”

John talked about how the changes may continue to help promote the profession. He commented, “I think we are doing a great job recently on trying to get out of some of the shadows that we have been in the past.” He continued by discussing the importance of “educating others on what we do.” Similarly, Barbara said, “I am constantly having to define what we do and a lot of it is because of our name and people don’t understand what we do.” She said it is “part of my job is to educate those people who don’t understand.”

John, Susie, and Kay all talked about how the profession of athletic training is still “really young.” Susie went on to say, “I think with the more education that we give the public and who we are working with, the better.” She explained, “I know that a lot of physicians who are working with athletic trainers tend to really like our profession and will see – keep seeing us advance within other medical disciplines as well.”

Susie also spoke of how the changes in perception could come from continued efforts towards getting more athletic trainers employed in the high school sector. She said, “then more parents see athletic trainers or more students see and more coaches see, and so I think our public perception will continue to change.” However, people like Billy Bob are concerned that the ELM may make an idea like this more difficult. He explained his concern about not having enough athletic trainers at the high school level. He went on to say, “if we turn right around and say okay now they have to have a master’s to even be in the profession, it is going to make it more difficult for schools to find the funding to do that.”
Jane agreed that the lack of athletic trainers at the high school level is a major concern. She said that she believed it to be a “marketing” issue and that as a result “we are missing our major clientele.” She continued, “I would really like to see us start to refocus and go in that direction and market us as allied healthcare professionals for the physically active individuals.” She was hopeful that the potential changes would help the profession to “get a little bit better of a rep.”

Bill talked about the growing implementation of evidence-based practice versus handing down knowledge. He said that it will “give us that extra clout that makes us more like physicians and physical therapists.” Similarly, Whit talked about how changes may help the professionals be more “valued” in how they are viewed by others. He commented, “it will probably help us as programs negotiate for 12-month salaries versus nine-months so we can effectively oversee or partially oversee internships to make them part of the program.”

Kay talked about the need to “prove ourselves” even though she admitted that she hated to use that term. She related that comment back to her thoughts on how young the profession is and she said, “I think we need to up the ante on our programs as well.” She continued with, “I think we need to start requiring master’s and start requiring doctorates from our – from anybody that’s involved in athletic training to kind of up the ante in our knowledge base.”

Billy Bob spoke about how other professions such as physical therapy and occupational therapy are all required to have a master’s or doctoral degree to practice and how athletic trainers are allowed to practice with as little as a bachelor’s degree. He said, “it is implied that if you have an advanced degree over an entry level degree you ought to be at a higher level.” He went on to say, “Some people think that may help get our recognition that we deserve.”
Steph shared Billy Bob’s sentiments. She commented, “I believe we will gain more respect with the allied health community just because we are taking a step to get the more education, to pretty much hold ourselves at a higher standard or higher demands on us.” Although she believed it might take some time, she felt that as a result, “I do think we are going to gain a little more respect and we are going to be more prominent in the medical field or at least sports medicine.”

**Summary of themes.**

As a result of inductive examination of the interview transcripts, two major themes emerged that were shared among the participants. Those themes included (a) Knowledge & Experience…But a Lot of Experience, and (b) An Interesting Kind of Evolution. It was in these two themes that the participants shared their thoughts on experiences and perspectives that spanned from their own education to their thoughts as an educator on the future of athletic training.

Participants shared their motivations for becoming an athletic trainer, athletic training educator, and the impact that it made on their current teaching philosophy. With that philosophy in mind, they discussed their thoughts on how curriculum has changed over time and the effects of those changes. They discussed the relevance of internships within athletic training education and the effects that those experiences have made on the education of students pursuing careers in the field of athletic training. A “gap” was defined to explain the missing link between what students are getting in terms of current education and what the participants saw as something that is needed to help them better prepare for the profession. This chapter was concluded with participants’ thoughts on what the future holds in terms of athletic training education and the perceptions of the profession itself. The aforementioned themes will continue to be discussed in
greater detail in the chapter that follows. It is in the next chapter that recommendations will be made regarding the future practice, policy, and research in the field of athletic training education.
CHAPTER V
DISCUSSION

The primary purpose of the qualitative case study was to investigate the perceptions of athletic training educators regarding clinical internships in athletic training education programs (ATEPs). A phenomenological approach was utilized in the exploration of the perspectives and experiences of ATEP directors, clinical coordinators, and faculty instructors to gain understanding of the overarching phenomenon of internships within athletic training education curricula. Purposeful sampling was utilized to contact participants. Each participant was contacted individually starting with ATEP directors of the selected institutions and then subsequent members. The researcher conducted in-depth interviews that were approximately one hour long with 14 athletic training educators. Of this sample, five participants were ATEP directors, one participant was an assistant program director, three participants were clinical coordinators, and three participants were faculty instructors. This chapter will provide an overview of the study, seek to answer the original research questions, and evaluate the theoretical framework based on the research findings. In addition, implications for future practice and research will be discussed.

Overview of the Study

This collective case study sought to investigate athletic training educators’ perspectives and experiences relative to clinical internships within athletic training education curricula. The study was impelled primarily by the following research question: How valuable is the internship/clinical education experience in an ATEP students’ preparation for a career as a
certified athletic trainer (ATC)? However, subsequent questions were considered but not limited to:

1. How have the changes made within the Athletic Training curriculum, in response to program accreditation, affected ATEPs and students?
2. What differences, if any, are there amongst programs and what the students are learning?
3. What specific components of the internship make it a valuable experience for the student?
4. What are problematic areas or limitations within the internships?
5. What practices have emerged to better educate students through internship experiences?
6. What formal and informal learning experiences within the curriculum help the ATEP student to better prepare for the job?

In order to answer these questions, data was collected and transcribed from in-depth semi-structured interviews lasting approximately one hour conducted with 14 participants. After analyzing the rich, thick descriptions provided by participants regarding their perspectives and experiences relative to clinical internships in athletic training education curricula, two main themes emerged. These themes included: (a) Knowledge & Experience...But a Lot of Experience, and (b) An Interesting Kind of Evolution. The first theme, Knowledge & Experience...But a Lot of Experience discussed participants’ reasoning behind the adoption of their current personal teaching philosophies and how their educational backgrounds played an integral role. This theme also explored the nature in which these philosophies are reflected in the educators’ interactions with students. The second theme, An Interesting Kind of Evolution explored the participants’ views on mandating formal curricula in athletic training education and the effects of the level of education received by future athletic training professionals. This theme
also looked at how the view of the athletic training professionals changed as a result, the differences in ATEPs at different institutions, and real-life scenario preparation for students. Additionally, this theme investigated how out-of-class experiences contributed to persistence in the field of athletic training, typical expectations regarding these experiences, and how feedback plays an integral role in understanding the value of these experiences. Finally, this theme pointed out the “gap” between the current education that students are receiving and what educators felt like was needed most in terms of preparing students for the profession, as well as, takes a look into the future of the profession and its educational programs by discussing changes in the required degree level of athletic trainers and the outcome of how these professionals may be viewed as a result.

Discussion of Research Findings

Potteiger, Brown, and Kahanov (2012) argued that the past two decades have brought forth significant changes in athletic training education. This notion continues to ring true today as time continues to pass and more research is brought to light. This study examined the views of athletic training educators regarding internships in athletic training education based on their personal experiences and their experiences in working with students. The research focused on the primary research question: *How valuable is the internship/clinical education experience in an ATEP student’s preparation for a career as a certified athletic trainer (ATC)?* However, in order to truly understand the answer to this question, it is necessary to gain a better understanding of each of the related secondary research questions that were answered throughout the research process.
Secondary research question #1.

How have the changes made within the Athletic Training curriculum, in response to program accreditation, affected ATEPs and students?

In this study, it was evident that the athletic training educators’ perspectives were driven by not only their experiences as educators but also as students having gone through the educational process themselves. Through these experiences, the educators offered their views on how they saw changes having been made within the curriculum and their thoughts on its overall affects of both the programs and the students. These findings were discussed in both of the two major themes Knowledge & Experience…But a Lot of Experience and An Interesting Kind of Evolution.

In the theme, Knowledge & Experience…But a Lot of Experience it became apparent that the educational paths from which the individuals graduated had an impact on their perspectives as educators and greatly influenced their opinions as a result. As shown in Table 5, it was noted that some individuals graduated from a curriculum ATEP program and others graduated from the former internship route option. Participants such as Jerry, Jane, Carlton, Billy Bob, John, Bill, and Sharon, having all graduated form the former internship route option to curriculum, tended to focus their comments on how their experiences helped them to realize the importance of hands-on learning. Whereas, participants such as Whit, Barbara, Jane Doe, Steph, Susie, Kay, and CB, having all graduated from an ATEP, tending to focus their comments on their experiences around the foundation of a strong classroom background.

One of the major changes predominantly discussed during the interview process was regarding hands-on learning opportunities and how the focus of the mandated curriculum from accredited athletic training education programs (ATEPs) shifted to a more rigorous classroom
based education. The theme, *An Interesting Kind of Evolution* brought forth opinions surrounding these changes. In many cases, the educators felt as though the change to a required curriculum was one that was much needed and “was a good move” as Jane phrased it. Billy Bob, Susie, and CB commented on how the changes brought forth much-needed coursework additions and have improved the quality of coursework. Based on the information shared by the participants, it was evident that there was a need for more volume to be added to the curriculum in order for students to have a better opportunity to obtain the knowledge needed in the many facets that the profession encompasses. Although having the “strong foundation” and “background” in the classroom, as discussed by Susie, Barbara, Sharon, Billy Bob, Jane Doe, and CB, was seen as a good thing, there were skeptics amongst the group that were not entirely supportive of all of the changes made. For some, like Kay, the changes were too drastic.

Having gone from a heavily weighted hands-on learning experience to a now heavily weighted coursework learning experience, in some cases has not been the solution that the profession was looking for. In fact, in most cases, the educators felt as though there was something that was missing from the students’ overall education. These sentiments were addressed in the subtheme *The Effects of the Mandated Curriculum*.

Educators are often finding that students are not as prepared as they should be in regards to understanding the rigors of the profession. It was in the subtheme *The Effects of the Mandated Curriculum* where comments like Kay’s students who have come back to her after having graduated and telling stories of something that they wished they “would had learned more about this” and Barbara’s comments on how “they are not used to having to deal with stress of a student-athlete” surfaced. It was also in this subtheme that the educators brought forth ideas of how restrictive the curriculum can be and how there is just not enough time to teach everything.
that a student needs to learn. Although educators are trying to make the best of the situation by “maximizing” what time they do have with the students in trying to make for more purposeful learning situations, there is so much that needs to be learned many educators are left feeling like Jane Doe in thinking that there are some things that are not going to be learned until they are experienced.

Other strong points made regarding the changes in curriculum and the effects on ATEPs and students were brought up in the theme Knowledge & Experience...But a Lot of Experience and the subtheme Sink or Swim. In this section, the educators surfaced thoughts on how experience was of great need for students entering the profession of athletic training. Many of the educators, like CB, Sharon, Billy Bob, Barbara, Kay, and Bill, all talked about how more “experience,” “time,” and “hand-on” opportunities were needed in order for the students to gain the knowledge and understanding needed to fully understand the profession and to be able to be a well-functioning practitioner within the profession. Some educators, like Carlton, Stephanie, John, and Whit believed that a simple solution would be to “test” the students by putting them in more situations where they had to show and apply what they know. However, thoughts on the “quality” of education also dominated the conversations had by many such as CB, Jerry, Bill, and Susie. It was here that suggestions were made regarding increased training of preceptors/clinical educators and instructors, allowing the students to do more in learning opportunities, and mentorship and how each of these can increase the quality of the information that the students are receiving in terms of their education.

Aside from discussing changes in the curriculum and how the effects made on the educational process of students in the ATEPs, educators also discussed how these changes have impacted the way in which the students are being viewed once they enter the workforce. In the
theme An Interesting Kind of Evolution and the subtheme The Effects of the Mandated Curriculum surfaced thoughts surrounding this topic, and in many cases, it was argued that athletic training professionals are still not given the recognition and credit they deserve as allied healthcare professionals. There were some, like Kay, Billy Bob, Susie, and Barbara that said a lack of understanding of the profession is what keeps athletic trainers in the shadows of other professions. The “stigma” of the profession was something that was discussed by Carlton, John, Steph, Whit, and Bill. Others like Jerry, Jane, CB, and Jane Doe were hopeful that things would continue to change for the better.

Secondary research question #2.

What differences, if any, are there amongst programs and what the students are learning?

As educators talked about the changes made in athletic training education over time, they discussed their thoughts surrounding the differences that can exist in ATEPs. In the subtheme The Effects of the Mandated Curriculum, it was found that many of the educators felt as though there are differences in programs and the way in which students are learning the required information. Though strict guidelines have been posed by CAATE in regards to the curriculum, many have found that there is “leeway” in the manner in which ATEPs are providing students that knowledge.

Bill, Jane Doe, Sharon, CB, and Carlton discussed their thoughts on how differences are often based on the institution and the resources that they have. As mentioned by the participants, the financial state of the institutions play a big role in the resources that they have. In some cases, limited resources could result in a lack of athletic training specific courses. Instead, institutions in this position are left with the challenge of meeting CAATE requirements through
the utilization of existing courses that are embedded in other departments. Some examples of these types of courses may include nutrition, psychology, and other general science based courses.

Others, like Jane and Steph, argued that some programs continue to emphasize one aspect over the other in terms of clinical versus coursework. For Jane, her experience as a site visitor brought this notion to light. Whereas, Steph’s current employment is at an institution that focuses predominantly on the clinical aspect of learning.

Still there are some that believed there are some programs that do everything by the book and there are others programs that do not in regards to their delivery of information. For example, statements made by Whit and Kay found that the way the CAATE standards are being implemented into the curriculum could be the source of the variance from program to program. Although the educational requirements are the same for each program, according to CAATE standards, the information in not always taught the same by the instructors from one institution to another. However, in contrast to this belief, Jerry and Susie thought there were not as many differences in today’s curriculum versus that of the past. They agreed that the “structure” and “general core” allows for more opportunities for students to “get the same information.”

**Secondary research question #3.**

*What specific components of the internship make it a valuable experience for the student?*

Athletic training educators brought to light three main components of internships that make them a valuable experience for students. These components emerged in the subtheme *Required Internships in Athletic Training – Are They the Answer?* It was in this theme that the educators talked about how these types of experiences contributed to persistence in the field of
athletic training, some typical expectations of students when considering these experiences, and whether or not these types of experiences influenced students’ preparation for the profession.

The first component that the educators revealed was the notion that these types of experiences were indeed useful in regards to a student’s persistence in the field of athletic training. Many of the responses regarding this notion were positive. The educators explained that many of the students use these types of experiences to figure out if this is the job that they actually want to do and whether or not they want to continue working towards a degree that would help them to get a job in athletic training. The majority of the responses were positive in saying that students were “fired up” once they came back from these experiences and wanted to share and show what they had learned. For some, like John, Jane, and Steph, it was suggested that similar types of experiences in other fields is what actually led them to pursue careers in athletic training. However, Jerry’s comment on internships being the “hallmark of learning” best describes the majority of the participants thoughts on how students, when given the opportunity to practice and apply the knowledge in a setting that they are passionate about, reach a whole new level of appreciation and admiration for the profession.

The second component that the educators unraveled was that internships tend to offer some sort of benefit to their future in the profession and allows them to gain the experiences that they so desperately desire. Again, in the subtheme Required Internships in Athletic Training – Are They the Answer?, the educators talked about how many students take on internships as a means to reach their “ultimate goal” or “dream job.” In many cases, educators such as Susie, Whit, John, and Jane Doe said that students wanting to work at the professional level took internships working in that setting so that they could resume build, network, and/or build relationships with others in this area of practice. Others argued the point that students wanted to
gain more experience and that the reason they were participating in these experiences was so they could have more freedom and gain more of the hands-on experiences that they were not privy to them in their curriculum experiences. However, Carlton pointed out that students needed to utilize these opportunities to recognize how they should practice. He argued that internships were a way for students to learn how to communicate, to learn how to be involved in a dynamic, and how to work with others. He said that internships were an opportunity for students to learn how to conduct themselves as professionals in the field of athletic training.

The third, and arguably the most significant, component that the educators shared was that internships do influence students’ preparation for the profession. These thoughts were also shared in the sub theme Required Internships in Athletic Training – Are They the Answer? The majority of the educators agreed that the effects were positive. Again, these experiences are offering the hands-on learning that they may or may not have been exposed to. Regardless, students are getting more opportunities to learn in these types of experiences.

*Secondary research question #4.*

What are problematic areas or limitations within the internships?

Again, the educators more predominantly spoke about the positives of the internship experience. Although these comments did not appear to be prevalent enough to create an emerging theme, there were a few comments made about how there could be some potential indicators that would cause students to have a poor internship experience. For example, Sharon and Carlton talked about how these experiences can be seen as “time wasting” or “hobbling” to students due to “poor structure” and “poor mentoring.” It was these types of experiences that resulted in leaving the student with more to be desired. As Jane put it, “there is always one in
every group.” Carlton compared a bad internship experience to a bad date. He said, “If you ask the wrong person out, you are not going to have a good experience.”

John said that some students might get “overwhelmed” after seeing the many different ways of doing things. He also said it is possible that students could pick up “bad habits” of doing things that “may be not so by-the-book.” On the other hand, Whit talked more about how he often finds the good in the bad by challenging students with uncomfortable situations, people that they may not want to work with, or places that they may not have wanted to go. He said the reason behind this is because “No. 1, to challenge the student,” and “No. 2, because that was done to me when I was a student.” Again, showing how his philosophy stemmed from his experiences and how it now reflects on his teaching methods, Whit remarked that he found that his students “typically respond well to the challenge.”

However, there were some other comments made by participants that could also shed light on another potential problematic area of internships. If the educators are not careful in their supervision of the internships and the students are not careful in the selection of the types of internships that they choose to involve themselves in, they could potentially find themselves doing more grunt work than learning. Comments made by Carlton and John pointed out that athletic trainers of today are still trying to fight the stigmas of being mistaken for coaches and glorified water boys. With this in mind, it is key for students to involve themselves in learning experiences that optimize their experience and not just serve as an extra set of hands to help the supervisor get his or her job done.

*Secondary research question #5.*

What practices have emerged to better educate students through internship experiences?
In reviewing the data, the educators emphasized the importance of obtaining feedback regarding internship experiences. Thoughts surrounding this inclination were outlined in the theme *An Interesting Kind of Evolution* and subtheme *Required Internships in Athletic Training – Are They the Answer?* In this section, the educators discussed the importance of the information received from students regarding these experiences and how this information often plays an integral role for future experiences and opportunities to be had by other students. The feedback provided allows the educators to consider whether or not to continue utilizing a particular site, how well the supervisor interacts with the student, and how much autonomy that the student was afforded in the learning environment. In some cases, as Kay put it, “it’s been almost kind of a game changer.” It was found that feedback was obtained in many different ways. In some instances, feedback was informal and offered in just a conversation, like that found at Institution A. In others, like that required of students at Institution C, it is given in a formal presentation required of the students upon their return. However, it was found that some students only offer feedback when asked, as suggested by Bill. In cases such as these, it would be beneficial to have a more formal means of obtaining the information needed to ensure whether or not the experience was educational. This goal could potentially be accomplished through the utilization of student surveys or exit interviews taken at the time prior to the student’s graduation. Similarly, feedback from the employers that later hire these students could also be obtained through the use of surveys or interviews that involve questions about the performance of these employees.

In many cases, it was found that what a student gets out of an experience is dependent on what they put into the experience. Having a desire to be at a particular site is something that definitely factors into the success of the experience. If the student is not engaged in the
environment then they are not likely going to gain much from the experience. However, Jane Doe talked about how students have to take ownership in their learning experiences. She said that this will sometimes requires the student to take the initiative to get the information that they need in order to learn and to not always rely on the preceptor to do all of the work. Thoughts such as these indicated that the experience could also be relative to those in charge of supervising the students that are participating at a particular site.

In contrast to the comment made by Jane Doe, CB brought up an interesting point that the outcome of the experience is sometimes reliant on the preceptor. He said, “they need to be able to be engaged with our students in an educational environment as opposed to just being really good in the clinic with their patients.” For this reason, Institution D spends time training and educating preceptors or supervisors of students in the clinical sites that their students attend for clinical experiences. Although he did mention that this was a CAATE requirement, there was not much talk about this amongst the other participants. According to CB, his institution does regular preceptor training or retraining in order to meet these requirements.

**Secondary research question #6.**

*What formal and informal learning experiences within the curriculum help the ATEP student to better prepare for the job?*

In considering this research question, the data revealed that “experience” and “quality instruction” were the two best means of preparing the ATEP student for the job. Thoughts surrounding this notion were revealed in the theme *Knowledge & Experience...But a Lot of Experience* and subtheme *The Effects of the Mandated Curriculum*. In the subtheme *Bridging the “Gap,”* educators continued to make their arguments in relation to adding more of these types of hands-on experiences to student learning.
In regards to “experience,” educators expressed their thoughts related to the students’ need for more “time,” “hands-on time,” and “experience” within the curriculum. Educators like CB and Sharon gave good examples when talking about how restrictive the curriculum can be in the sense of all the courses that they are “bogged down” with and the lack of time that makes it difficult to “experience” and “focus” on what is needed most. However, it was the clinical experiences and internships that seem to help the students the most in terms of getting what they needed.

The idea of “quality instruction” was also found to be a recurrent topic in regards to helping the students better prepare. The educators in this study heavily stressed the need for properly trained instructors, preceptors, and supervisors. Some ATEPs struggle in this area because of their reliance on young and inexperienced staff. In some cases, the makeup of the staff and educators may be weighted down with graduate assistants that are not so far removed from being in programs themselves. In other cases, the students are not being allowed to participate as much as they want and are willing to do. CB and Bill talked about how preceptors should allow the students more opportunities to practice the skills they learn and how this would help them to retain the information they have received and in turn improve their knowledge and skills.

**Theoretical Analysis**

This section provides a brief summary of the theoretical framework used in the study. For the purpose of this study, Kolb’s Experiential Learning Theory (ELT) was utilized to explore the concept of experience-based learning and how it is related to athletic training education (Kolb 1984; 2005). This theory was detailed extensively in chapter two of this study. In this
section, the connections made with the major areas of focus of this theory and the findings are analyzed and explained.

**Kolb’s experiential learning theory & athletic training education.**

As a review, Kolb (1984) defined learning as “the process whereby knowledge is created through the transformation of experience” (p. 38). Furthermore, he described experiential learning as a “process of constructing knowledge that involves a creative tension among the four learning modes that is responsive to contextual demands” (p. 38). These four learning modes included (Kolb, 1984, p. 27):

- Concrete Experience (CE), a feeling dimension;
- Reflective Observation (RO), a watching dimension;
- Abstract Conceptualization (AC), a thinking dimension;
- Active Experimentation (AE), a doing dimension

Heffler (2001), similar to Kolb (1984), argued that the optimal learning environment is one in which all four stages of learning (accommodator, assimilator, converger, and diverger) take place in order to resolve problems. He continued with thoughts that each individual has his or her own style of learning. With these thoughts in mind, the use of Kolb’s ELT in the analysis of this research provided an important lens through which to view the phenomenon of internships in the field of athletic training.

Stradley, et al. (2002), argued that athletic training students were not characterized to have a “typical” predominant type of learning style. However, due to the nature of this study, a strong emphasis was placed on the “hands-on” experiences that are strongly associated with concrete experience and active experimentation (Kolb & Kolb, 2005). If Kolb’s Theory is applied to the concept of internship type experiences in the field of athletic training, then these
types of learning experiences could arguably be a critical component of the student’s overall learning and knowledge. In fact, research in other areas of medicine argued that Kolb’s theory appears to be a valid and useful model in regard to the instructional design of medical education (Jaarsma, et al., 2009; Gude, et al., 2009; Fletcher, 2007).

In this study, the concept of internship was considered in terms of its relationship with athletic training education. Like many other healthcare related fields, athletic training is an area of specialization in which experiential learning plays a significant role in the educational experience of its students and future professionals. In many cases, this form of “hands-on” learning is one that continues to follow these professionals throughout their careers as a means to constantly and consistently improve upon their practice within the field. Similar to that of many other fields of medicine, athletic training continues to look for ways to enhance curriculum and the education of its professionals. As discussed in chapter four, the participants noted that there have been gains based on the changes within athletic training curriculum overtime in having gone from the internship route to ATEPs or curriculum based programs. This profession continues to battle with other professions in its rank amongst allied healthcare professionals of today. Educators in the field of athletic training continue to look for ways to provide their students with optimal learning environments despite the stigmas of the profession, despite restrictions placed on the curriculum, and despite resources that they may have readily available to them.

Kolb’s theory has been and can continue to be applied to athletic training education in terms of determining the best methods of practice in relation to the information being provided to athletic training students (ATS) and the way in which it is being delivered. As previously mentioned, arguments made by Ristori, Eberman, Tripp, and Kaminski (2011), found that
“learning may improve when the preferred learning style of an ATS is matched to the teaching style of an Approved Clinical Instructor (ACI)” (p. 33). More importantly the study found that professional behavior played an even more predominant role in the ACIs ability to serve as an effective mentor to the ATSs. This concept is similar to that found amongst the comments made by educators in this study. Many, if not all, of the educators made some sort of connection between the supervision/mentorship of the ATSs and the successful outcome of those ATSs internship experiences. As suggested in the subtheme Required Internship in Athletic Training – Are They the Answer?, in most cases, those experiences were found with positive praises offered by the students upon their return. However, it was insinuated the opposite could easily occur if the student had been placed in a situation in which he/she had a supervisor that did not fully understand the mentor role that was being asked of them.

Brower, Stemmans, Ingersoll, and Langley (2001), believed that the student’s style of learning and the effectiveness of the experience could affect the student’s ability to rise to the challenge. Similarly, in this study, the educators expressed thoughts that suggested that students had positive experiences when placed in settings that they were interested in and with people whom they were interested in working with. Again, it was insinuated that the experiences were not as positive when placed in situations in which the opposite occurred.

Armstrong, Weidner, and Walker (2009) found that the real-time opportunities provided to ATSs and the ways in which they are evaluated are a critical aspect of learning style. Similar to comments made by the educators in this study, it was suggested that identifying methods of evaluation could play an integral role in developing better strategies in regards to determining a student’s clinical skill proficiency. Thoughts surrounding similar notions were expressed in the subtheme The Effects of the Mandated Curriculum.
Implications & Recommendations for Higher Education Policy and Practice

From this study, the proposed curriculum change in athletic training education was brought to light. Talk of the potential mandating of an “Entry-Level Master’s Degree (ELM)” was popular amongst educators interviewed in this study. Thoughts surrounding the comments made by educators in regards to this were discussed in the subtheme Athletic Trainers of the Future. Since the time of completion of the research utilized within this study, the idea of mandating a master’s level degree in athletic training has now become a reality.

After two and a half years of consideration and critical examination of what should be the appropriate level of degree required of upcoming professionals in the field of athletic training, a decision was made in the later part of May 2015 to establish the professional degree in athletic training at the master’s level (NATA, 2015). It was determined that this degree type would be most appropriate “to best prepare athletic trainers for an integral role in the evolving healthcare system.” As mentioned in the Strategic Alliance Degree Statement (NATA, 2015), this decision is not one to be taken lightly. Athletic Training Education Programs at institutions that currently are not at the master’s level will be required to make the needed changes, as suggested by CAATE recommendations, by a deadline of no later than 7 years. CAATE plans to release information regarding the degree implementation timeline after the Commission meeting planned to be held in August 2015.

The impact of this decision is one of significant consequences for athletic training education and curricula. Currently there are well over 350 Athletic Training Education Programs in the country. Of that total, approximately 56 programs presently offer a degree at the master’s level. The concerns that the educators brought forth in this study are likely to have only touched the surface of the many concerns that became prevalent and are yet to come after the release of
this decision. Educators at institutions without a master’s level degree will now have to factor in the numerous potential issues surrounding their ability to make a transition to master’s education possible.

As if finding the time to implement the “hands-on” types of experiences discussed in this research were not already a challenge, educators will now have to consider new ways in which the master’s curriculum can accommodate experiential education and how outside learning experiences will be viewed. The traditional graduate assistant positions that are now present across the profession will dissolve as a result of this change. The reason being that at some point the future pool of people with bachelor’s degrees in athletic training will dry up and there will no longer be pool of candidates to choose from. These individuals are the ones that have always filled these positions. When these programs are abolished, the future existence of certified athletic trainers holding bachelor’s degrees eventually would come to pass. In consideration of this soon to be reality, educators will have to consider new ways of accommodating mentorship and the hiring of the much-needed help for student-athlete care that some smaller institutions have heavily relied upon through these positions that are filled by bachelor’s degree level certified athletic trainers going to school for their master’s degree.

In addition, many institutions with bachelor level degree programs have utilized master’s level graduate assistants as instructors within baccalaureate programs. With the implementation of the required master’s level degree for certification to practice athletic training, doctoral graduates will be required by many institutions to teach the master’s level students. As a result, institutions will likely need to hire more faculty members with doctoral degrees to teach the master’s students. In turn, this may leave the smaller, less financially endowed institutions with questions of how they will make this transition to cover higher costs for instruction.
The impact could even span beyond that of just figuring out how to transition a curriculum and how to cover courses. Without graduate assistants, some institutions will be challenged in finding new ways to cover the numerous sports housed by their athletics departments. For example, in many cases, athletic trainers with bachelor’s degrees that are enrolled in master’s programs and working as graduate assistants are used to cover smaller, lower-risk for injury sports, and/or serve as extra help with the larger more high-risk for injury sports. In light of this, the graduate students will no longer have certification and will therefore be unable serve in the traditional role as an athletic trainer in a graduate assistantship. This shift could lead to a whole gambit of issues ranging from overworked staff due to having to make up the difference in coverage to financial issues associated with funding new positions to accommodate the same level of care and coverage now provided. Furthermore, a lack of care and coverage could have immediate and possibly severe consequences for student-athletes in higher education institutions. Therefore, a first recommendation of this study is that institutions need to consider alternative methods of employment to ensure the safety of the student-athlete. A possibility exists that internships could be created to fulfill this role, attracting newly certified master’s graduates in athletic training to higher education institutions to work with student-athletes.

The list of issues surrounding this change could go on. However, not all of the changes surrounding the implementation of the degree change are necessarily bad changes. The change to a master’s level degree could mean an increase in salaries for future professionals. Although it is not likely a change that will occur quickly, having professionals employed with a minimum of a master’s degree could mean that institutions and other employers alike will need to consider budgeting for these advanced degree professionals. Retention in the profession is a lot more
likely to occur from individuals with master’s level degrees and could also contribute to salary increases down the road.

Another positive aspect for athletic training professionals that should be considered by institutions and other employers alike is how this change could effect the reputation of the professionals graduating from an advanced degree. The educators in this study suggested that this change might help with providing the well-deserved recognition that athletic trainers have so desperately fought for over the years. This change could also lead to salary changes and budgeting concerns.

Regardless of these ideas surrounding current practices of athletic training, the new master’s level degree will need to address the issues that the educators (like those within this study) have found within the current curriculum. Now even more burden is being placed on the ATEPs to shore up the clinical experiences for master’s students. The clinical experiences that the students get while enrolled in the programs have to be more effective considering the timeframe that the curriculum in the mandated master’s degree will have to work with. Now, maybe more so than ever, pressure will fall on the clinical coordinator to ensure the effectiveness of the learning experience and as a result program directors will be held more accountable to ensure that this is managed properly. With this in mind, a second recommendation of this study is that programs need to adopt more stringent training and evaluation of preceptors.

Changing the degree level in which athletic trainers will be required to obtain in order to become certified and reducing the timeframe in which they complete this degree could potentially up the ante for the types of preceptors needed to accommodate the demands of the clinical education aspect of learning. As mentioned in the interviews of this study, preceptors can greatly impact what the students learn in the clinical environment. Preceptors must keep the
ultimate goal in mind when interacting with athletic training students in the clinical environments. Jerry recalled an old cliché that came from one of his mentors, “Teach the program, not your passion. You know, passions are okay but you need to focus on what the student needs to know at that given time of their educational level.” Preceptors may find that sentiments such as this may be helpful in keeping their focus in the clinical settings. This idea is reflected by the research done by Walker, et al. (2008) that showed that the primary goal of clinical education is to aid in the acquisition, development, and mastery of the clinical proficiencies that stem from the five domains of athletic training, as defined by the Board of Certification’s 2009 Athletic Trainer Role Delineation study (2010, p. 18).

On a similar note, Carlton said, “education should drive practice.” His comment was followed with an explanation of the purpose of the Board of Certification exam. He continued, “it validates what the practice is but the practice is driven by the education.” In saying that, the preceptors’ knowledge of current practice is key to a more effective learning environment. In fact, the profession’s recent move towards placing more emphasis on evidence-based practice (EBP) (Welch, et al., 2014) supports this notion not only in preceptors but also in all of its clinicians. The way in which preceptors learn and implement evidence-based practice will greatly impact the outcome of the learning experience of the student placed under their supervision and will in turn impact the overall education of the student.

Programs of the future will find it to be imperative that preceptors are properly trained and evaluated on components such as the teaching of mastery of clinical proficiencies and the utilization of EBP within the clinical setting in order to determine the effectiveness of their teaching methods and the success of the learning environment in which the students are involved. This was an idea that CB resonated throughout his interview. As a clinical
coordinator, he is a proponent for recognizing that students need to be put in situations where preceptors pay attention to them. Situations that he described as “not just going to be a work force but they are actually going to learn something at their clinical experience.” By placing specific guidelines on what the students should be learning, properly training the preceptors according to these guidelines, and then evaluating them on how this information is being conveyed to the student, the potential for more consistency in outcomes of these learning environments and the overall education of the students will be created. With this in mind, a third recommendation of this study is that programs need to explore and adopt more effective methods of evaluation in regards to the clinical experience.

Aside from Board of Certification first time pass rates, many programs have no hard evidence regarding the effectiveness of their curriculum in relation to the success of the future practitioners that they have educated. In the past, educators have relied heavily on the learning outcomes of students and student feedback to determine whether or not the clinical experience component of their education program was up to par. Through the comments of the participants, it was discovered that the feedback provided by students was often delivered in ways that were sporadic and unstructured. Evaluations of ATEPs are what Potteiger, Brown, and Kahanov (2012) found to be useful in determining the shortcomings of the overall curriculum. By creating a more structured method of evaluation for clinical experiences, ATEPs would similarly create a more consistent means of determining the shortcomings of the curriculum specifically in this area. This is an area that Walker, Weidner, and Armstrong (2008) suggested that structure is definitely needed.

As mentioned in the introductory chapter of this study, Weidner and Henning (2005) found that athletic training students perceive the majority of their professional development skills
to derive from clinical education. For this reason, the researchers argued that it is important for athletic training students to be involved in an extensive educational internship program to better prepare them as entry-level/certified athletic trainers (Weidner & Henning, 2005). By creating a more effective method of evaluation, programs could ensure that their students are getting the knowledge that they need to become successful clinicians. In doing so, factors such as “active learning time” (Berry, et al., 2004), “teachable moments” (Rich, 2009), and “sufficient supervision” (Weidner, et al., 2006) could all be measured according to the impact made on the student’s educational experience, learning, and skill development. In turn, programs could potentially have a more clear perception of real-life application of skills learned in athletic training curriculum (Armstrong, et al., 2009). However, mastering clinical skills and knowledge found within the classroom are only parts of the whole in relation the overall educational experience of the athletic trainer.

Carlton spent time in his interview talking about the importance of interpersonal skill development and learning how to communicate as an athletic training professional. He said, “I can teach you process…but a lot of the things that we do is all about learning how to work with people.” This was an area that he found clinical experiences to be helpful because “one of the things that the clinical experiences do is learning how to communicate, learning how to be involved in a dynamic, and work with different individuals.” What Carlton described as “Work Force 101,” is something that is not often taught within the classroom and is something that is not often learned unless the student is provided with a clinical experience that nurtures an understanding of this area of professionalism. With this in mind, a fourth recommendation of this study is that programs need to consider incorporating dispositions of professionalism within the curriculum.
Weible (2010) argued that internship experiences could potentially help future graduates in their preparation for a career by affording them the opportunity to gain increased knowledge in job-related skills, achieve more advanced creative and critical thinking ability, enhance their communication skills, build stronger resumes, develop better interviewing skills, provide more opportunity by way of multiple job offers, and higher potential for more money to be earned. Carlton described these experiences as an opportunity for the students to learn “how to walk, how to talk, how to conduct themselves as a modeling process.” He went on to explain that students need to learn “how to communicate, I’m not talking about on email or texting, but how to sit there and how to do conflict resolution, how to work with others.”

This is an area that other fields of medicine and healthcare appear to be ahead of the game in figuring out how to do this and how to do it effectively. Programs might consider, an idea presented by Billy Bob, implementing courses and clinical experiences that require athletic trainers to interact with other healthcare professionals. This could create a better understanding of each of the healthcare professionals role in the care of the athlete.

Teacher education is also another area that seems to have a better grip on understanding how to implement this aspect of learning into the overall education of the student. Through student teaching, students are placed in actual classroom settings in which they are required to interact with teachers, students, and other education professionals. In some cases, these student teachers can receive disposition infractions for poor conduct and if enough of these infractions are received they can be dismissed from the programs. Maybe this could be one way for ATEPs to weed out the people who are not cut out for the profession.

In turn, the ATEPs could help to enhance professional knowledge by instilling dispositions in the professional that make them more credible. Therefore, creating higher
standards for professional practice. It is possible that the faculty and clinical supervisors associated with the programs could help to reinforce this idea.

Similar to the lack of effective evaluations (Potteiger, Brown, & Kahanov, 2012), creating opportunities for interpersonal communication is another area in which programs have been found to fall short (Massie, Strang, & Ward, 2009). Overall, educators need to continue to consider the population in which they are dealing with and the needs of that specific population. With this in mind, a fifth recommendation of this study is that programs should consider special topics courses to cover emerging trends and topics in the field of athletic training.

As argued by the participants in this study, being able to effectively communicate and handle difficult situations is a big component of being a successful athletic trainer. However, knowledge and skill acquisition are two things that continue to be crucial to the future vitality of the athletic training profession. With so many changes occurring not only in current practices of athletic training (Welch, et al., 2014) but also in the sports themselves, the effective management of student-athlete care is growing ever more important.

In her interview, Barbara talked about changes that she has seen in the world of medicine and how athletic trainers have an increased need for a background in general medicine as a result. This notion of “knowing a little about a lot” is one that was shared by other participants, like CB and Billy Bob, to name just a few. Barbara, unlike other participants, spoke specifically on areas such as drugs and psychology. She suggested that these were two major areas in which her current practice as an athletic trainer and instructor within the program finds a need for more education of the student in order to properly care for the student-athlete. However, these two areas are only the tip of the iceberg in managing student athlete care and the research that is related.
As mentioned earlier, the incorporation of evidence-based practice (EBP) has become a huge component of educating athletic trainers. To provide a more clear understanding of the importance of this knowledge to the profession, athletic trainers are required to prove their efforts towards understanding research and effective practice measures through the mandated number of continued education (CE) requirements set forth by the BOC. Over a two-year span, the overall number of required CE units is a total of 50 units. Of the 50 total units, athletic trainers are now required to have 10 of those units fall under the category of EBP.

The importance of research in the field of athletic training and the care of athletes continues to grow annually. Rising trends in health-risks associated with athletics, such as sickle cell trait/disease and concussions, has made their way to the forefront of media. Of the more than 1.3 million injuries that occur each year (NATA, 2013), concussions alone can account for an estimated 1.6 to 3.8 million injury incidents per year (NCAA, 2011). With athletes constantly submitting their bodies to the stresses of the sport, athletic trainers are left with trying to figure out how to help manage that stress. The implementation of special topics courses could potentially help to address some of the more specific areas of athletic training and the proper care of athletes. These courses could potentially include topics such as drugs and psychology, as mentioned by Barbara. They could also include topics that could potentially enhance the overall knowledge of the athletic trainer by exposing them to more generalized areas of understanding, such as that of student development theory which is often found as a key component of understanding in higher education.

In considering the need for research and understanding in more specialized areas of medicine through courses such as these, one cannot help but question how faculty will be able to manage all aspects of athletic training education. In fact, there could potentially be some debate
amongst educators regarding whether or not the faculty that are primarily engaged in research will be able to provide the students the support that they will need in the field to make sense of their learning. With this in mind, a sixth and final recommendation for this study is that institutions should consider making clinical faculty appointments within athletic training education in order to create more knowledgeable professionals and functional practitioners.

This is where clinical faculty can play a big role. Clinical faculty would be athletic trainers with a significant amount of professional experience and who also have knowledge about teaching. They could be paid as a faculty member but also serve as a resource in the field of athletic training. This concept is similar to that of an alternative faculty appointment that is emerging in various other professional practice fields. What this means is that they do not have the same research requirements as a tenured faculty member but that they have teaching and service responsibilities.

The establishment of these types of positions could aid in the tightening of the clinical experience of the students and their overall knowledge in the field of athletic training. Athletic training, while being an experiential field, relies heavily on concrete experience (CE) and active experimentation (AE) in relation to Kolb’s model (Kolb, 1984). Clinical faculty working with the tenured faculty will help to enhance student learning related to the reflective observation (RO) and abstract conceptualization (AC) components of Kolb’s model by joining both theory and practice. As a result students could potentially be exposed to various learning environments through varied teaching styles. In turn, this could help to accommodate different styles of student learning as suggested by Potteiger, Brown, and Kahanov (2012) and potentially optimize the learning opportunity for students in the field of athletic training education (Armstrong, Weidner & Walker, 2009).
A number of recommendations for higher education policy and practice were proposed throughout this chapter. Table seven details all of the recommendations. Numbers and descriptions are utilized to list each of these recommendations below.

Table 7

*Summarization of recommendations for this study*

<table>
<thead>
<tr>
<th>Recommendation #1</th>
<th>Institutions need to consider alternative methods of employment to ensure the safety of the student-athlete.</th>
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<tbody>
<tr>
<td>Recommendation #2</td>
<td>Programs need to adopt more stringent training and evaluation of preceptors.</td>
</tr>
<tr>
<td>Recommendation #3</td>
<td>Programs need to explore and adopt more effective methods of evaluation in regards to clinical experience.</td>
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<tr>
<td>Recommendation #4</td>
<td>Programs need to consider incorporating dispositions of professionalism within the curriculum.</td>
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<tr>
<td>Recommendation #5</td>
<td>Programs should consider special topics courses to cover emerging trends and topics in the field of athletic training.</td>
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<tr>
<td>Recommendation #6</td>
<td>Institutions should consider making clinical faculty appointments within athletic training education in order to create more knowledgeable professionals and functional practitioners.</td>
</tr>
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**Implications for Higher Education Research**

Through research with this diverse group of educators, additional areas for potential research were discovered. Continuing to research the relationship between internship style learning experiences and how they help to prepare students for careers as certified athletic trainers is vital to the profession. Obtaining new information will help educators to proactively implement students into learning environments which they can be more successful rather than reactively trying to find ways to supplement the areas in which current curricula lack.
It was also discovered that the use of the term “internship” is one that could be interpreted in many different ways. For starters, I had to clarify with the educators when using the term “internship” versus speaking in regards to the former “internship route” to athletic training that was once allowed as an alternative to the now mandated curriculum. Additionally, there were varied interpretations of the word “internship” when asking participants about this style of learning experience.

For the purpose of this study, I chose to define the term internship as “an opportunity for students to apply classroom learning in clinical practice.” I also chose to define the phrase internship in athletic training as “an opportunity afforded to either undergraduate or graduate students to apply classroom learning in clinical practice while involved within an ATEP.” I went on to explain in this definition that this type of experience “typically occurs within the last year or two of the curriculum program but is not always limited to this timeframe or circumstance” and that “in some cases, internships may occur after the athletic training student has graduated and received his/her certification as a means to gain further work/hands-on experience.” These definitions provided me with a broader picture of the “hands-on” learning experiences afforded to students in the ATEPs of today. Consequently, it also surfaced two different types of experiences. One of which occurs during the curriculum in the clinical experience aspect of the curricula (that could be on or off campus) and the other in which students went out on their own to choose experiences (that could be during the time they were in school or after they finished their degree). Future researchers looking for more specific findings in regards to one particular type of “internship” experience may want to make a more narrowed definition of the word.

In addition, the implementation of the changes mandated in regards to the required degree level of future athletic training professionals has brought forth a whole new subject area for
future research. It was suggested, by the educators within this study, that these changes could pose more challenges in regards the timeframe of future curricula and the amount of time spent in clinical experiences. However, this notion brought to light some other potential areas and questions for research that were not directly addressed by the participants.

One question that came to mind was, *Will the changes in the required mandated program attract a more diverse population of individuals to the field?* Currently, and historically, the field of athletic training is heavily dominated with professionals that are white males. The required mandated program of a professional master’s degree could potentially align the field of athletic training with that of other healthcare professions. By raising the status of the degree, there is potential for other attributes to increase such as average salary and status amongst other healthcare professionals. In turn, this could lead to a more diverse pool of students that are attracted to the profession. Implications of this movement could play a significant role in the interaction with a diverse body of athletes, especially at the higher education level.

Another question that came to mind was, *Are we getting a better professional as a result of the mandated changes?* This is a question that can only be answered by continued research. From what was learned from the participants regarding internships, I believe that internships could continue to play an integral role in the education of future professionals in athletic training. Obtaining a better understanding of the value of internships could be critical to program and curricula development in athletic training for the future. Considerations should be made as to whether or not internships are necessary in the continued clinical education of athletic trainers in regards to the success and longevity of the careers of these professionals. It could be that ATEPs of the future adopt a model more similar to that of medical school, as suggested by CB:
Where they take all the class or course work and then after they’re done with the course work they would do kind of an immersive clinical experience where they go to a full-time role in a clinic even though they are not certified yet. However, it could mean that ATEPs need to consider a three-year master’s program, as pondered by Jerry. Aside from the potential risks of high costs and decreased recruitment, the extra time could potentially provide the needed opportunity for a more diverse clinical background through the implementation of more clinical experiences. It could also provide the opportunity, as suggested by Billy Bob, for more clinical and classroom experiences with other healthcare professionals so that they gain a better understanding of “what each professional does” and develop a better understanding of the “team of providers taking care of patients.”

**Recommendations for Higher Education Research**

Regardless of these two questions posed out of my own personal curiosity, research on a more broad scale may be needed in order to obtain a better picture of the value of internships in athletic training education. Keeping in mind the data collected from this study and its outcome, with a relatively small number of participants came a more narrowed collection of data. By involving more participants in this study the potential outcome could be that the voices of the educators would be better represented.

New research based on outcomes will be needed to determine the effectiveness of the programs of the future. Areas such as clinical experiences, classroom knowledge, and skill acquisition will all have to be investigated in new ways in order to determine the effects of the newly mandated degree level. As previously mentioned, considerations should be made as to whether or not internships are necessary in the continued clinical education of athletic trainers in regards to the success and longevity of the careers of these professionals. Furthermore, to gain a
better overall understanding of the impact of internships in athletic training education, one might consider the perspective of the student as well.

**Summary**

This qualitative collective case study explored athletic training educators’ perspectives and experiences surrounding internships within athletic training education and their role in preparing future professionals. Fourteen phone interviews were digitally recorded, transcribed into transcripts, and then analyzed for major themes. Two major themes were identified in speaking with educators on their thoughts on how internship experiences prepare students for a career in athletic training. Those themes included: (a) Knowledge and Experience…But a Lot of Experience, and (b) An Interesting Kind of Evolution.

Kolb’s Experiential Learning Theory (1984; 2005) was utilized within this study to provide helpful information and enhance the understanding of how to approach different learning styles in higher education. This theory was kept in mind throughout the study in the consideration of the specific type of learning environment that is found in the field of athletic training. The participants of this study argued that there are some differences in the ATEPs and the method is which the curriculum is being distributed amongst varying institutions, it was clear that clinical experiences play a key role in the overall education of the educational professionals in athletic training and in the education of the students in athletic training programs. Although athletic training students are not typically characterized as having a predominant learning-style type (Stradley, et al., 2002), many are found to identify themselves with the hands-on learning that is strongly associated with the concrete experience and active experimentation of Kolb’s Theory (Kolb & Kolb, 2005). This mimics the thoughts expressed by the participants of this study in regards to clinical experiences and clinical education.
Participation in internship experiences was indeed found to be beneficial to the preparation of ATEP students for future careers in athletic training. Additionally, it was found that these types of learning experiences were critical in supplementing the much needed time that the curricula of today often lacks. Although the strict rigors of coursework have definitely improved upon the education level of those in the field of athletic training, it was argued that the “hands-on” experience still fights for its significant role in the knowledge needed by young and upcoming professional in athletic training.

With the mandate of the new degree program, the future of athletic training education is now found to be somewhat uncertain. As a result, the education of future professionals is not likely the only thing that will change. The view of the profession and its associated professionals will likely change as well. Regardless of the uncertainty of the outcome, the educators of this study continue to stay positive in regards to the oncoming changes that are now certain to be made. They are hopeful that the future of athletic training and athletic training education is hopefully one that will continue to flourish.

Considerations must be made towards new methods of educating athletic training professionals. Not only are educators faced with the challenge of converting their programs to the new professional master’s degree, but also institutions of higher education will soon be faced with the challenge of finding new ways to provide optimal care to their student-athletes. This could potentially provide more opportunities for internships to be utilized creatively within athletic training education.

Finally, the recommendations and implications of this study were discussed. This study has implications for higher education policy and practice and future research. The findings of
this study could influence the method of curriculum development amongst institutions of higher learning and the way in which athletic trainers are being educated.
REFERENCES


Retrieved from


strategies to enhance the use of evidence-based practice. *Journal of Athletic Training*, 49(2), 234-244.


APPENDICES
APPENDIX A
APPENDIX A

IRB Approval from the University of Mississippi

Subject: IRB Approval of Protocol 15x-155
Date: Wednesday, February 04, 2015 11:48 AM
From: irb@olemiss.edu
To: Heather Landry
Cc: KERRY B MELEAR; AMY EILEEN WELLS DOLAN
Inbox

Ms. Shirley:

This is to inform you that your application to conduct research with human participants, "The Value of Internships within Athletic Training Education: An Educator's View" (Protocol #15x-155), has been approved as Exempt under 45 CFR 46.101(b)(#1 and 2).

Please remember that all of The University of Mississippi's human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.

It is especially important for you to keep these points in mind:

- You must protect the rights and welfare of human research participants.
- Any changes to your approved protocol must be reviewed and approved before initiating those changes.
- You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.

If you have any questions, please feel free to contact the IRB at irb@olemiss.edu.

Ashley S. Crumby, PharmD
Graduate Student Assistant, Research Integrity and Compliance
University of Mississippi
213 Barr
P.O. Box 1848
University, MS 38677-1848
U.S.A.
+1-662-915-7482
irb@olemiss.edu | www.olemiss.edu

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Hello, my name is Heather Shirley. I am a doctoral student in Higher Education at The University of Mississippi. To complete the requirements for my program, I am conducting a qualitative case study intended to gain a better understanding of clinical internships within Athletic Training Education Programs (ATEPs). I would like to share some of the details of this study with you and inquire about your possible participation within this study.

(IF YES) As you may know, athletic training education has evolved from what was once a predominantly internship driven curriculum to a more defined core curriculum that is intended to enhance the credibility of its practitioners within the healthcare world. The changes made within the curriculum have created more structure yet in some cases have placed restriction on contact hours in which student can apply what they have learned towards a real-life clinical experience. As a result, I would like to explore the value placed on these types of hands-on learning experiences through the utilization of student placement within internship experiences.

Since program directors serve as the hub for the ATEPs and are most knowledgeable with the program in its entirety, I have chosen to first seek out individuals such as you and then follow that with other members of the ATEP faculty at the same institution including clinical coordinators and faculty instructors to help build on my understanding of that particular institutions approach. I have chosen these types participants for several reasons. First, the perceptions of these individuals have not been sought before regarding these types of experiences. Second, athletic training education is continuously changing and this type of research could be sought as a contributing factor in the outcome of some of those changes. Lastly, this study does have an element of irony. In early ATEPs, students were given more flexibility in hands-on learning experiences pending the type of program that they were involved in (internship vs. curriculum). Over time, the curriculum evolved to become more competitive with other medical healthcare professional fields in order to attain more credible professional status amongst its competitors. Now, all ATEP curriculums are based on the same guidelines set forth by CAATE and the BOC and some feel that the curriculum are lacking in preparation of the student for real-life situations and future careers within the profession.

As the program director at your institution, I believe your participation within this study is key to the overall success of this study. Participation in this study will require approximately an hour of your time and will be recorded. Do you have any questions about this study at this time? May I please schedule a time to interview you via telephone or Skype?
(IF YES) Your interview time is set for _________________. I look forward to speaking with you. I will be sending you a follow up email that will include an information sheet that further describes the details of this study with a statement of consent and consent for words release. I ask that you please read over this information carefully and return signed copies of these forms to me prior to the time of your scheduled interview. In the meantime, please feel free to contact me with any questions you may have at hlandry@olemiss.edu or 662-801-8522. Thank you again for taking the time to speak with me. Have a good day. Good-bye.
APPENDIX C
APPENDIX C

Script for Initial Telephone Conversation with Clinical Coordinator and Faculty Instructor

Hello my name is Heather Shirley. I am a doctoral student at The University of Mississippi. To complete the requirements for my Doctor of Philosophy, I am conducting a study. The purpose of my qualitative case study is to gain a better understanding of clinical internships within the Athletic Training Education Programs (ATEPs) at _________________.

Once a predominantly internship driven curriculum, athletic training education has evolved towards a more defined core curriculum that is intended to allow them to be viewed as more credible professionals within the healthcare world. The changes made within the curriculum has created more structure yet in some cases has placed restrictions on contact hours in which students can apply what they have learned towards a real-life clinical experience. As a result, I would like to explore the value place on these types of hands-on learning experiences through the utilization of student placement within internship experiences.

I have chosen program directors, clinical coordinators, and faculty instructors as the participants in this study for several reasons. First, the perceptions of these individuals have not been sought before regarding these types of experiences. Second, athletic training education is continuously changing and this type of research could be sought as a contributing factor in the outcome of some of those changes. Lastly, this study does have an element of irony. In early ATEPs, students were given more flexibility in hands-on learning experiences pending the type of program that they were involved in (internship vs. curriculum). Over time, the curriculum evolved to become more competitive with other medical healthcare professional fields in order to attain more credible professional status amongst its competitors. Now, all ATEP curriculums are based on the same guidelines set forth by CAATE and the BOC and some feel that the curriculum are lacking in preparation of the students for real-life situations and future careers within the profession.

As someone who is currently involved in the ATEP at your institution, I am eager to hear about your experience with these types of learning environments. Participation in this study will require approximately an hour of your time and will be recorded.

Do you have any questions about this study at this time? May I please schedule a time to interview on your campus? Can you please provide a confidential setting for this interview?

Your interview time is set for _________________. I look forward to speaking with you. In the meantime, please feel free to contact me with any questions you may have at hlandry@olemiss.edu or 662-801-8522.

Thank you again for taking the time to speak with me. Have a good day. Good bye.
Dear __ (Name of Participant) __,

This letter serves as a follow up to our conversation on (date). During this conversation, you indicated that you would be willing to participate in my qualitative case study that seeks to gain understanding in the perceived value of internship experiences in Athletic Training Education Programs (ATEPs) and how those experiences help to prepare students for their professional careers.

Your interview has been scheduled for (DATE and TIME). As a reminder, this phone/Skype interview will take approximately one hour of your time. Prior to this interview, I am requesting that you please sign a release form and return the form to me via email to hlandry@olemiss.edu or fax with cover page to 662-915-5275.

I have attached a copy of the Institutional Review Board approval from the University of Mississippi. If you need additional information, please feel free to contact me at hlandry@olemiss.edu or 662-801-8522. You may also contact my faculty advisor, Dr. Amy Wells Dolan at aewells@olemiss.edu or 662-915-5710.

Again, it was a pleasure to speak with you. Thank you for your assistance and I look forward to speaking with you in the future.

Sincerely,

Heather L. Shirley
Doctoral Candidate – Higher Education
The University of Mississippi
APPENDIX E
APPENDIX E

Information Sheet and Consent Form

Information About a Qualitative Research Study

**Title:** The Value of Internships Within Athletic Training Education: An Educator’s View

**Investigator**
Heather Landry Shirley  
The University of Mississippi  
3112 Antioch Road  
Randolph, MS 38864  
(662) 801-8522

**Advisor**
Amy Wells Dolan, Ph.D,  
Associate Dean/Associate Professor of Leadership and Counselor Education  
137 Guyton Hall  
University, MS 38677  
(662) 915-5710

**Description/Purpose:**
The purpose of this phenomenological qualitative study is to gain a better understanding of clinical internships in ATEPs. The phenomenon of clinical internships will be explored through the use of one-on-one interviews with ATEP program directors, clinical coordinators, and faculty/instructors. For this research study, a program director will be considered to be a full-time employee of the sponsoring institution with full faculty status, rights responsibilities, privileges, and full college voting rights as defined by institution policy and that are consistent with similar positions at the institutions necessary to provide appropriate program representation in institutional decisions. A clinical coordinator will be considered to be a faculty member (the Program Director or other duly appointed faculty) that must be identifies as the Clinical Education Coordinator, must be allowed release/reassigned workload to meet the institutional responsibilities for Clinical Education, and must assure: student clinical progression, clinical site evaluation, student evaluation, preceptor training, and preceptor evaluation. A faculty member/instructor will be considered to be a currently employed tenured, tenure track, or clinical professor.

**Procedures:**
Participants will be interviewed via telephone or skype (whichever is most convenient for the participant at the time of the interview). The duration of each interview is approximately 60 minutes based on the depth of discussion. The identities of the participants will be kept confidential through the use of pseudonyms created by participants or the researcher. Participants will be asked a series of exploratory questions that will include but not be limited to the level of internship involvement that is allowed by students within your ATEP, how it effects their overall education, and what experiences are found to be the most valuable. The interviews
will be audio-recorded. The audio recordings will then be transcribed. Once this process has been completed, the participant will then be given an opportunity to review his/her transcript.

**Risks and Benefits:**
During this interview, you will be asked to reflect and respond to questions regarding your perception of student experiences in internship style learning environments. Moreover, the researcher is intending to obtain information regarding personal experiences and thoughts regarding current procedures involving internships and thoughts on potential changes and/or improvements on practices in the future. The risks associated with this study are minimal and may be limited to discomfort or uncertainty about whether the information requested by the investigator is public knowledge and can be published in a dissertation. Additionally, you may feel uncomfortable about reflecting on past occurrences that were adverse. If at any time you become emotionally distressed the researcher will allow you an opportunity to collect yourself. The researcher does not guarantee or promise that you will receive any benefits from this study. Your decision whether or not to participate in this study will not affect your reputation.

**Cost and Payments:**
The interview will take approximately 60 minutes of your time. Otherwise, there is no cost associated with this interview for the participant.

**Participation Rights:**
Your participation in this study is strictly voluntary. If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent on discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

**Confidentiality:**
Every effort will be made to ensure anonymity unless written permission is provided by you (participant) to disclose your name.

**IRB Approval:**
This study have been reviewed by the University of Mississippi’s Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

**Statement of Consent:**
I have read the information above and have been given a copy of this form. I have had the opportunity to ask questions, and received answers. I consent to participate in the study.

**Questions**
If you have any questions about this research project, please feel free to contact me, Heather Shirley, at 662-801-8522, or my advisor Dr. Amy Wells Dolan, at 662-915-5710.
APPENDIX F
THE UNIVERSITY OF MISSISSIPPI

RELEASE

For valuable consideration, I do hereby authorize The University of Mississippi, its assignees, agents, employees, designees, and those acting pursuant to its authority (“UM”) to:

a. Record my participation and appearance on videotape, audiotape, film, photograph or any other medium (“Recordings”).
b. Use my name, likeness, voice and biographical material in connection with these recordings.*
c. Exhibit, copy, reproduce, perform, display or distribute such Recordings (and to create derivative works from them) in whole or in part without restrictions or limitation in any format or medium for any purpose which The University of Mississippi, and those acting pursuant to its authority, deem appropriate.
d. I release UM from any and all claims and demands arising out of or in connection with the use of such Recordings including any claims for defamation, invasion of privacy, rights of publicity, or copyright.

Name: _______________________________________________

Address: _____________________________________________

Phone No.: ___________________________________________

Signature: __________________________________________

*As explained in project overview and consent, pseudonyms will be used to portray participant “likeness” and maintain institutional confidentiality.
APPENDIX G
APPENDIX G

INTERVIEW PROTOCOL

INTRODUCTION:

Hello/good morning/good afternoon, my name is Heather Shirley. I am a doctoral student in Higher Education at the University of Mississippi. Thank you so much for agreeing to spend some time speaking with me today. Your interview could last approximately one hour and will be recorded using a digital device. I will ask you a series of questions.

Please answer all questions to the best of your ability. Stop me at any time you are feeling uncomfortable or have a question. I will be taking notes during your interview. Questions will center on process, not content. Again your participation is completely voluntary.

Before we begin, I would like to review the information sheet and the release form you received a while ago via email.

(READ THROUGH THE CONSENT FORM TOGETHER)

Now that we have discussed the documents, do you have any questions? (IF NONE) I have your signed consent form that was returned to me via email.

Now that we have taken care of all of these items, we will begin the interview. You will be asked to choose a pseudonym by which you would like to identify yourself. Once you have shared it with me, I will use that name throughout your interview. The first couple of questions will be demographic information about you.

If there are no further questions, I will now begin the recorder…
Opening Script:
(Name of participant), thank you for agreeing to participate in this study that will seek to gain understanding of how valuable internships/clinical education experiences are in an ATEP students’ preparation for career as a certified athletic trainer. I am interested in hearing about your experiences as an athletic trainer and educator, and how your ATEP utilizes internships/clinical education experiences within the curriculum to help develop your student’s skills. I will start by asking you to discuss some broad topics and then ask some more pointed questions to gain more details on certain areas of interest.

QUESTIONS/KEY POINTS:
Let’s start with you telling me about your background in athletic training…
*Looking for info on:

1. How did you become an AT?
2. What was your experience as an AT like?
3. Where did you work?
4. Did you graduate from an internship or curriculum ATEP?
5. Did you participate in an internship experience?

How has the field of athletic training changed over time…
*Looking for info on:

1. How has the certification process changed?
2. What changes do you see in the level of education of athletic trainers?
3. How have these changes affected the way athletic trainers are viewed in comparison to other healthcare professionals (i.e. physical therapists)?

From your perspective, how has the curriculum changed over time…
*Looking for:

1. Curriculum vs. Internship route?
2. What changes have been made to amount of time spent in hands-on learning experiences?
3. How has the utilization of internships/clinical education experiences been implemented?
4. How different are the curriculums at different programs?
5. How much opportunity is there for curriculums to vary based on their interpretation of the recommended guidelines?
6. How do recent changes affect student’s preparation for real-life scenarios within the profession?
7. What do you think students are in need of most in terms of preparation for the profession?

Tell me about your experience as an educator and working within this ATEP…

*Looking for info on:

1. How did you become an educator?
2. Have you served in any other capacity within the ATEP other than your current position/role?
3. What is your level of involvement with the ATEP students in general (inside and outside of the classroom)?
4. What type of influence, if any, did your experience as a student in an ATEP have on your philosophy as an educator?

Tell me about how your ATEP utilizes internship/clinical education experience for skill development…

*Looking for info on:

1. How have out-of-class experiences contributed to the persistence of students? (looking for examples)
2. What are typical expectations and interests of your students?
3. What types of accommodations have been made to satisfy students’ areas of interest?
4. Can you tell me about some of your students’ success stories?
5. What has worked well in internship/clinical education experiences and what has not?

Tell me about how the curriculum of your ATEP prepares students for their internship experiences…

*Looking for info on:

1. What type of experiences does your program offer?
2. How do you, as the educator, evaluate internship sites/experiences?
3. What type of feedback have you received from students regarding their experiences?
4. How has feedback from students and internship sites helped to make changes for future experiences?
5. How have these experiences influenced students’ preparation for the profession?
What do you believe to be the next step after an internship experience in preparation of students towards their profession?

Where do you see the future of athletic training and ATEPs going?

*Looking for info on:

1. Any changes in curriculum?
2. Any changes in the way the profession and/or its professionals are viewed?

CONCLUSION:
This concludes the interview session. Are there any comments that you would like to make or any questions that you would like for me to answer at this time?

Closing Remarks:
Your insight on this topic has been very helpful and I am very grateful for your participation in this study. Once the transcripts have been typed, I will email your interview to you. At that time, please feel free to contact me to make any needed changes or clarifications. If you find that you have additional information to share, please feel free to contact me at hlandry@olemiss.edu or 662-801-8522. Thank you for your time and the opportunity to study this phenomenon more closely.
June 29, 2015

Heather L. Shirley
University of Mississippi
3112 Antioch Road
Randolph, MS 38864

Fax #: 662-915-5275

Dear Heather L. Shirley:

You have our permission to include content from our text, *EXPERIENTIAL LEARNING: EXPERIENCE AS A SOURCE OF LEARNING & DEVELOPMENT*, 1st Ed. by KOLB, DAVID A., in your dissertation "The Value of Internships within Athletic Training Education: An Educator's View at the University of Mississippi.

Content to be included is:
P.42, 96 Figure 3.1 Kolb's Learning Cycle, Kolb's Learning Style Categories as compared to Modes of Learning, 4.10The Competence Circle Showing Adaptive Competence as They Relate to Learning Styles.

Permission is granted for material to be printed for yourself, the school committee and instructor. Material may also be electronically stored on the University of Mississippi website.

Please credit our material as follows:

Sincerely,

Mary Ann Vass, Permissions Specialist
VITA

HEATHER LANDRY SHIRLEY, MA, ATC, BCTMB/LMT
hlandry@olemiss.edu
(662) 915-7536

EDUCATION

The University of Mississippi, University, MS 2009-Present
PhD in Higher Education – Doctoral Candidate
Major: Higher Education
*Anticipated Dissertation Completion Date: August 2015

The University of Mississippi, University, MS 2002-2004
Master of Arts Degree
Major: Higher Education/Student Personnel

Medical Training College, Baton Rouge, LA 2001-2002
Certification in Massage Therapy

Louisiana State University, Baton Rouge, LA 1996-2001
Bachelor of Science Degree
Major: Kinesiology
Concentration: Fitness Studies

ATHLETIC TRAINING EXPERIENCE

The University of Mississippi, University, MS March 2011-Present
Senior Athletic Trainer
*Responsibilities:

Primary Sport Responsibilities: Volleyball/Softball

▪ Supervisor of Assistant Athletic Trainers for sports including: Baseball, Soccer, & Softball (July 2012 – Present)
▪ Supervisor of all Graduate Assistant Athletic Trainers for sports including: Volleyball, Men’s & Women’s Tennis, Men’s & Women’s Golf, & Rifle
▪ Scholarship, Recruitment & Hiring Process of Graduate Assistants
▪ Work directly with Senior Associate Athletic Director of Health & Sports Performance (Shannon Singletary) on athletic training issues that arise, daily
operations of program, development of policies and protocols (as well as managing and updating the Sports Medicine policy and procedure manual), assist in coordination of staff development and communications

- Supervisor of Starnes Athletic Training Room and responsible for administrative duties concerning facility and staff
- Coordinator of all athlete physicals
- Coordinator of pharmacy bills and in-services on pharmacy policy
- Coordinator of Athletic Training Website (Ole Miss)
- Coordinator of SEC phone manual/directory
- CPR/BLS Instructor and Coordinator of all Staff Instructors
- Coordinator/Supervisor of practicum hours for Athletic Training Student Interns from various campuses including, but not limited to: Troy University and Delta State University
- Coordinator of special events
  - 2013 SEC Men’s Tennis Championships
  - 2013 NCAA Men’s Tennis Championships
  - 2012 SEC Women’s Tennis Championships
  - 2011 SEC Women’s Softball Championships
  - 2011 Women’s Golf Pro-Am/Intercollegiate Tournament, hosted by The University of Mississippi

*Additional Daily Responsibilities:
- Daily athletic training room coverage; evaluating, treating, rehabilitating injuries; practice, game and travel organization; medical documentation through Injury Zone computerized injury management software; Biodex testing and workout protocols.

**Senior Athletic Trainer (June 2007-March 2011)**

*Responsibilities:

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**Primary Sport Responsibility: Women’s Basketball**

- Supervisor of Graduate Assistant Athletic Trainers for Men’s & Women’s Golf
- Work directly with Senior Associate Athletic Director of Sports Medicine (Shannon Singletary) on athletic training issues that arise and daily operations of program
- Coordinator of Basketball Practice Facility Athletic Training Room (2010-2011)
- Coordinator of Starnes/C. Leroy Mullins Athletic Training Room (2007-2010)
- Coordinator of all athlete physicals
- Coordinator of pharmacy bills and in-services on pharmacy policy
- Director of Student Athletic Trainer Camp (2004-2010)
- Coordinator of Athletic Training Website (Ole Miss)
- Coordinator of SEC phone manual/directory
- CPR/BLS Instructor and Coordinator of all Staff Instructors
- Coordinator of special events
  - 2009–2011 Women’s Golf Pro-Am/Intercollegiate Tournament, hosted by The University of Mississippi at Oxford, MS
  - 2008-2010 Men’s Golf Pro-Am/Intercollegiate Tournaments, hosted by The University of Mississippi at Madison, MS

*Additional Daily Responsibilities:
Daily athletic training room coverage; evaluating, treating, rehabilitating injuries; practice, game and travel organization; medical documentation through Injury Zone computerized injury management software; Biodex testing and workout protocols.

**WNIT Women’s Basketball Tournament – First Round (2010)**

**Assistant Athletic Trainer (June 2004-2007)**
* Responsibilities:

**Primary Sport Responsibilities:** Women’s Basketball, Men’s Golf, Women’s Golf, Rifle

- Assist with coordination of all athlete physicals
- Assist with inventory and supply organization/management

*Additional Daily Responsibilities:
Daily athletic training room coverage; evaluating, treating, rehabilitating injuries; practice, game and travel organization; medical documentation through Injury Zone computerized injury management software; Biodex testing and workout protocols.

**WNIT Women’s Basketball Tournament – Second Round (March 2006)**

**WNIT Women’s Basketball Tournament – First Round (2010)**

**WNIT Women’s Basketball Tournament – First Round (2010)**

**WNIT Women’s Basketball Tournament – Second Round (March 2006)**

**WNIT Women’s Basketball Tournament – First Round (March 2005)**

**NCAA Women’s Basketball Tournament – Elite 8 (March 2007)**

**NCAA Women’s Basketball Tournament – First Round (March 2005)**

**Moreau Physical Therapy, Baton Rouge, LA May 2001 - May 2002**

**Physical Therapy Technician**
*Responsibilities:
Daily treatments/modalities, as well as, aiding patients through their rehabilitative exercises; assisting with daily treatment logs on patients; inventory control/assessment; occasional typing and receptionist work.

**Assisted with NCAA Track & Field Outdoor Championships (May 2002)**

**Louisiana State University, Baton Rouge, LA**

Student Athletic Trainer

*Sport Responsibilities:
  - Women’s Tennis (2000-2001) - Head Student Athletic Trainer
  - Women’s Soccer (1999-2000) - Head Student Athletic Trainer
  - Women’s Volleyball (1997-1998) - Head Student Athletic Trainer

*Additional Responsibilities:
  Daily athletic training room coverage; evaluating, treating, rehabilitating injuries; practice, game and travel organization; Cybex Norm testing and workout protocols; inventory control/assessment.

**Also assisted with all home track and field events, baseball regional tournaments, softball regional tournaments, and gymnastics/swimming & diving meets on occasion.**

**MASSAGE THERAPY EXPERIENCE**

**Bethany’s Spa & Salon, Oxford, MS**

*Massage Therapist* 2005 – 2011

*Responsibilities:
  - Manual Therapeutic Massage services provided to clients
  - Appropriate documentation and recordkeeping of all therapeutic massage services provided for clients
  - Proper care and maintenance of all equipment and materials involved in providing therapeutic massage services

**TEACHING EXPERIENCE**

**The University of Mississippi, University, MS** 2013-Present

*Adjunct Instructor – Health, Exercise Science, & Recreation Management*

Course: HP 303 – Prevention & Care of Athletic Injury

**The University of Mississippi, University, MS** 2002-2007

*Substitute Instructor – Health, Exercise Science, & Recreation Management*

Course: HP 303 – Prevention & Care of Athletic Injury
American Heart Association CPR Courses – The University of Mississippi

**CPR/BLS Lead Instructor & Program Coordinator** 2004-Present

*Responsibilities:
- Coordinate all ANNUAL courses for Athletic Training Staff, Graduate Assistant Athletic Trainers, Athletic Training Student Workers, Strength & Conditioning Staff, Interns, Sport Coaches, Athletic Department Staff, and UM Foundation Staff
- Serve as Lead Instructor for all courses provided

**Mississippi Athletic Trainers’ Association Annual Symposium** June 2007

*Guest Lecturer* - Philadelphia, MS

*Topic: Therapeutic Massage: The Effects and Benefits of Manual Therapy

**The University of Mississippi Student Athletic Training Camp** 2004-2009

*University, MS*

**Director/Lead Instructor**

- Coordinate all coursework for athletic training camp, including scheduling times, speakers, and locations
- Design, create, and administer all course booklets, handouts and lab materials associated with lecture/labs to be taught throughout the camp

**The University of Mississippi Student Athletic Training Camp** 2002-2003

*University, MS*

**Instructor**

*Responsibilities:
- Lecture on various topics including anatomy, emergency care (bracing/splinting/spineboarding), CPR/First Aid, kit organization, and medical documentation
- Assist with coordination of all coursework for athletic training camp, including scheduling times, speakers, and locations
- Assist with the design, creation, and administration of all course booklets, handouts and lab materials associated with lecture/labs to be taught throughout the camp

**CERTIFICATIONS / LICENSURE**

American Heart Association – BLS Instructor/Certified (CPR/AED for HCP/Heartsaver/FirstAid)

Instructor Since: 2004  Status: Current

National Athletic Trainers’ Association, Board of Certification (ATC)

Certification #: 110302018  Date of Certification: November 2003  Status: Current

Nationally Certified Therapeutic Massage & Bodyworks Professional

Certification #: 325142-00  Date of Certification: May 2002  Status: Current

Mississippi State Board of Health-Licensed Athletic Trainer
License#: *AT0355*  
Date of Licensure: *June/July 2004*  
Status: *Current*

**Mississippi State Board of Massage Therapy**  
RMT #: 792  
Date of Registration/Licensure: *2005*  
Status: *Current*

**Mississippi State Board of Medical Licensure-Medical Radiology Permit**  
Permit#: R01922  
Date of Licensure: *2008*  
Status: *Current*

**ORGANIZATIONS**

**Mississippi Athletic Trainers’ Association**  
Officer: Secretary  
*July 2008- June 2012*

**Mississippi Athletic Trainers’ Association**  
Member  
*June 2004-Present*

**National Athletic Trainers’ Association**  
Member (# 980404)  
*August 1999-Present*

**Student Athletic Trainers’ Association, Louisiana State University**  
Officer: Vice-President  
*January 2000-May 2001*

**SAAB (Student Athlete Advisory Board)**  
Representative of Student Athletic Trainers  
*August 1998-May 2000*

**Tiger Pride**  
Football Recruiting Assistant  
*August 1997- May 2001*

**Freshman Executive Committee**  
Louisiana State University – Student Government Association  
*August 1996-May 1997*

**HONORS & AWARDS**

**Graduate Assistant Athletic Trainer**  
Scholarship Recipient – The University of Mississippi  
*June 2002-May 2004*

**Student Athletic Trainer of the Month** – Louisiana State University  
*April-June 2000*

**Acadian Ambulance & Air Medical Services**  
Sports Medicine Scholarship/Adam Sturlese Memorial Fund  
*(Awarded to the Student Athletic Trainer of the Year as chosen by the Louisiana State University Staff Athletic Trainers)*  
*September 1998*
Student Athletic Trainer Scholarship Recipient  
Louisiana State University  
August 1997 - May 2001

TOPS Scholarship Recipient for Academic Excellence  
August 1996-May 2001