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Program Evaluation: The Alignment of an Undergraduate Athletic Training Preparation Program to the Clinical Standards

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Program Evaluation: The Alignment of an Undergraduate Athletic Training
Preparation Program to the Clinical Standards

by
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A Dissertation Submitted to the
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Approval Page

This dissertation was submitted by Brandy Perdue Clemmer under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Acknowledgements

Dedicated to my amazing family and members of Team Clemmer.

Abstract

Program Evaluation: The Alignment of an Undergraduate Athletic Training Preparation Program to the Clinical Standards. Clemmer, Brandy Purdue, 2012: Dissertation, Gardner-Webb University, Clinical Education/Athletic Training/Instructional Delivery/Approved Clinical Instructors/Clinical Instructor Behaviors

The purpose of this study was to determine to what extent the clinical education aspect of the athletic training preparation program at a Division II university aligns with the clinical standards. The program evaluation focused on current undergraduate athletic training candidates who were officially accepted into the current athletic training program. An assessment was given to better understand the current students' perceptions of their clinical instructor. Along with current students, alumni of the athletic training program were surveyed to evaluate their readiness attitude as they entered entry-level positions in athletic training. The clinical instructors also completed an evaluation form to categorize the clinical instruction taking place in the athletic training program. Using the mixed methods approach to gather qualitative and quantitative data assisted the stakeholders in evaluating the current status of clinical instruction. This enabled the program to create a strategic plan including the establishment of long-term and short-term goals. The program evaluation enabled the stakeholders to set measurements to determine if goals and benchmarks were achieved.

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Chapter 1: Introduction and Nature of the Problem

Introduction

Clinical experiences are vital to the education of professionals in the allied health professions (Leaver-Dunn, 2002). In fact, clinical education is used in many health care educational programs to reinforce theoretical information presented in a didactic environment. Exposing students to these clinical experiences is critical; clinical experience affords the learner the ability to apply theory while fostering problem solving, decision making, and critical thinking (Lauber, Toth, Leary, Martin, & Killian, 2003). Along with physical therapy, nursing, and other medical disciplines, the hands-on experience has proven to be the single most important aspect of the students' educational preparations (Leaver-Dunn, 2002). The authentic experiences of preventing, evaluating, and treating real athletic injuries enhance the students' understandings and abilities to apply content knowledge associated with the educational competencies and clinical proficiencies (Mensch & Ennis, 2002).

Athletic training students perceive that 53% of professional development comes from clinical education (Weidner & Henning, 2002a). Clinical education helps the learners develop a sense of social responsibility and emphasizes the importance of ethical practice through the integration of theoretical and practical components with real life patient scenarios. Clinical education should encourage appropriate skills, behaviors, and attitudes for professional practice. As the student progresses through the athletic training education program, he/she will gain clinical competence and confidence (Educational Council, 2006).

The educational task force was created in 1994 (Delforge & Benhnke, 1999) to research how to improve and standardize athletic training education (ATE). Two primary

recommendations regarding athletic training education were (1) requiring that all certification exam candidates be graduates of a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited program, and (2) requiring the reorganization of the clinical experience. However, clinical education was the most pressing issue for reform (Laurent & Weidner, 2001).

Prior to the reorganization of clinical education, athletic training students felt they were providing a labor force. Students were socialized into the athletic training profession instead of receiving focused clinical instruction. Through socialization, students were accepted into a tradition and acquired the program's values, interest, skill and knowledge (Weidner & Henning, 2005). Without a carefully designed and monitored clinical experience, a student's learning is more likely to be accidental (Weidner & Henning, 2002a). Jarvis (1983) stated that education and socialization are different processes; however, an element of socialization is within any system of professional education (Clouder, 2003).

With the reform of clinical education came the development of the role for the clinical instructor (CI). Most athletic trainers did not have a background in pedagogy, and therefore lacked the information or direction needed to instruct students (Foster & Leslie, 2001). In 2001, the approved clinical instructor (ACI) and clinical educator (CE) concepts were developed. It was recommended by CAAHEP that certified athletic trainers associated with educational programs complete specialized training for their role as clinical instructors (Weidner & Henning, 2005). Each athletic training education program had a clinical educator who had been trained by the Educational Council to guide clinical instructors in his/her program. The training focused on fundamental teaching and learning theory as well as the development of an understanding of the

requirements of clinical education in general. The clinical instructor would recognize the relationship between learning performance, teaching style, and student outcome (Harrelson, Gallaspy, Knight, & Leaver-Dunn, 1998). The ACI and CE concepts are important for the development of a more structured and standardized clinical experience.

Turocy, Comfort, Perrin, & Gieck (2000) defined clinical education as the foundation of athletic training and the clinical instructor as the heart of kinetic learning. Weidner and Henning (2005) also recognized the importance of the clinical instructor and the need to bring credibility and validity to the educational practices of clinical instructors in athletic training. Professional standards for the selection, training, and evaluation of ACIs were developed and deemed necessary, clear, and appropriate by a panel of athletic training education experts (Weidner & Henning, 2005). The standards include the following:

1. The ACI demonstrates legal and ethical behavior that meets the expectations of members of the profession of athletic training.

2. The ACI demonstrates effective communication skills.

3. The ACI demonstrates appropriate and professional interpersonal relationships.

4. The ACI demonstrates effective instructional skills.

5. The ACI demonstrates effective supervisory and administrative skills when working with athletic training students.

6. The ACI effectively evaluates athletic training students' performances.

7. The ACI demonstrates clinical skills and knowledge that meet or exceed the athletic training education competencies and clinical proficiencies.

Participants of Study

The focus of this program evaluation is an undergraduate athletic training education program (ATEP) accredited by the Commission on Accreditation of Athletic Training Education (CAATE) at a Division II university. The university is a private institution located in the rural piedmont area of North Carolina. Athletic training students have the opportunity to work with eight certified athletic trainers and 15 NCAA Division II varsity teams on campus: These include football, volleyball, lacrosse, golf, basketball, baseball, softball, cross country, tennis, and swimming. The athletic training students also have the opportunity to work with off-campus affiliates. The clinical placement at the university is balanced with the intended outcome of an optimal comprehensive clinical experience.

In order to provide the athletic training students with the most comprehensive clinical experience, the university strives to balance clinical exposure to the following:

1. Upper extremity sports – include throwing sports, swimming, and gymnastics. These sports require extensive stresses on the upper body.

2. Lower extremity sports – include soccer, cross country, track, and basketball. These sports require extensive stresses on the lower body.

3. Equipment intensive sports – requires participants to wear protective equipment for the head and shoulders.

4. Allied health or off-campus professional teams, physical therapy, etc.

The National Athletic Training Association (NATA) stated that the best clinical experience occurs when athletic training students have the opportunity to participate in a minimum of 2 years of academic clinical education. With an outcomes-based approach, students are instructed and evaluated by ACIs or physicians in the following venues:

colleges/universities/industrial settings, secondary schools/hospitals, professional sports/olympic sports, and clinics.

Problem Statement

While faculty and students share views of what characteristics and behaviors make an effective clinical instructor, there are often different levels of importance to each based on their different perceptions and experiences (Morgan & Knox, 1987; Skeff, Stratos, Campell, Cooke, & Jones, 1984). Due to the lack of standardization among clinical instructors, there is no strategic plan to obtain student readiness in entry-level positions post graduation.

Purpose

The purpose of this study was to determine to what extent the athletic training preparation program at a Division II university aligns with the National Athletic Trainer Association Research Education Foundation clinical standards. The study also explored the different perceptions of clinical education in this program from students, instructors, and program directors.

Research Questions

1. How close do the program goals align with the seven standards/criteria that were funded by the National Athletic Trainer Association-Research and Education Foundation as measured by the ACI evaluation instrument?

2. To what extent does the undergraduate athletic training preparation program prepare candidates for entry-level employment as measured by alumni surveys?

3. What are the strengths and weaknesses of the clinical experience in the undergraduate athletic training preparation program as measured by both alumni surveys and the ACI evaluation instrument?

Overview of Study Design and Procedures

Using a program evaluation method, quality standards are outlined, relevant data are gathered, and outlined standards are applied to determine quality and effectiveness of the program (Fitzpatrick, Sanders, & Worthen, 2004). The results and recommendation from the program evaluation were shared with the athletic training program director, clinical instructional educator, approved clinical instructors, and the dean of the sports science department. Therefore, the study took an objective-oriented evaluation approach. Using the logic model allowed the stakeholders to identify how adequate each aspect (specific inputs, activities, outputs, and outcomes) of the program was, the strength and limitation of each aspect, and the changes in each aspect that may improve the program (Fitzpatrick et al., 2004). The athletic training education program director approved this study prior to the beginning of the research for this program evaluation (see Appendix A).

The unique feature of an objective-oriented evaluation approach is that the purpose of activity is specified, and then evaluation focuses on the degree to which the purpose is achieved. The data obtained from an objective-oriented evaluation from the study were used to "reformulate the purpose of the activity, the activity itself, or the assessment procedures and services used to determine the achievement of purpose" (Fitzpatrick et al., 2004, p. 145).

Practitioner guides to the logic model evaluation have built on the concepts underlying Provus's Discrepancy Evaluation Model. Provus's approach stayed true to the Tylerian belief which defined evaluation as the process of determining the degree to which the objectives of a program are, in reality, being attained. Provus viewed evaluation as "the watchdog of program management" and the "handmaiden of the

administration in the management of program development through sound decision

making" (Fitzpatrick et al., 2004, p. 186). Provus based his approach in his evaluation of

public schools in Pittsburg, Pennsylvania, and although in some ways he had a

management-oriented approach, the key characteristic of Provus's proposal stemmed

from the Tylerian tradition. Provus viewed the evaluation as the process of determining

standards, discrepancy, and gathering information about discrepancies to make decisions

to improve, maintain, or terminate the program or some aspect of it (Fitzpatrick et al.,

2004).

Structured around the concepts of the Discrepancy Evaluation Model, the logic

model is an effective method for charting progress toward the interim and long-term

outcomes. A logic model is a picture of how a program works – the theory and

assumptions underlying the program. A program logic model links outcomes (both short-

and long-term) with program activities/processes and the theoretical

assumptions/principles of the program. This model provides a roadmap of the program,

highlighting how it is expected to work, what activities need to come before others, and

how desired outcomes are achieved.

In order to answer the research questions of the study, an athletic training

education program at a private university in rural North Carolina was evaluated.

Qualitative and quantitative methods were utilized, enabling the study to take a mixed

method approach to determine the alignment of an undergraduate athletic training

preparation program to the National Athletic Trainers Association clinical standards.

Qualitative and quantitative data were gathered, recorded, analyzed, and reported using a

researcher-created validated survey.

An objective-oriented program evaluation was utilized in this study concentrating

on the logic model. According to Fitzpatrick et al. (2004), the logic model starts with a long-term vision of how program participants will benefit from the program. This program evaluation required analyzing program inputs (budgets, staff), activities (curriculum, clinical services), outputs (participation), and outcomes (short, intermediate and long-term goals). The logic evaluation model gives the stakeholders the ability to determine where the program is, where it needs to go, and what changes are needed to reach the program goals.

Definition of Research Terms

Approved clinical instructor (ACI). A Board of Certification certified Athletic Trainer with a minimum of 1 year of work experience as an athletic trainer, and who has completed Approved Clinical Instructor training. Certified athletic trainers who wish to be an ACI, and have less than 1 year of experience, and must be supervised by a more experienced ACI. An ACI provides formal instruction and evaluation of clinical proficiencies in classroom, laboratory, and/or clinical education experienced through direct supervision of athletic training students (National Athletic Trainers' Association, Inc. [NATA], 1999).

Certified athletic trainers (ATC). Unique health providers who specialize in the prevention, assessment, treatment, and rehabilitation of injuries and illnesses (NATA, 1999).

Athletic training student (ATS). A student who is enrolled in a CAATE accredited entry-level athletic training program (NATA, 1999).

Clinical education. The learning and practicing of clinical skills in the athletic training room (Laurent & Weidner, 2001). Clinical experience provides an opportunity for integration of psychomotor, cognitive, and affective skills, and clinical proficiencies

within the context of direct patient care. An ACI must directly supervise formal clinical education experience. A clinical instructor or an ACI must supervise other clinical education experiences during field experiences (NATA, 1999).

Clinical instructor educator (CIE). A Certified Athletic Trainer or physician who attends the NATA CIE seminar and is subsequently qualified to conduct an ACI training workshop. The CIE is expected to have a minimum of 3 years of work experience as an athletic trainer or physician. The CIE assists in the developing, implementing, and evaluating of the clinical education program at the academic institution. This responsibility includes assisting in the coordinating clinical experience in accordance with the clinical education objectives of the program facilitating the development of the clinical education setting and the approved clinical instructors (NATA, 1999).

Commission on Accreditation of Athletic Training Education (CAATE). The CAATE is the agency responsible for the accreditation of over 350 professional (entry-level) athletic training educational programs. The American Academy of Family Physicians (AAFP), the American Academy of Pediatrics (AAP), the American Orthopedic Society for Sports Medicine (AOSSM), and the National Athletic Trainers' Association (NATA) cooperate to sponsor the CAATE and collaborate to develop the standards for entry-level athletic training educational programs.

Clinical proficiencies. The entry-level athletic training clinical proficiencies define the common set of skills that entry-level athletic trainers should possess, and refine the structure of clinical education from the quantitative approach to an outcome-based qualitative system (NATA, 1999).

Clinical setting. Clinical environments where health care services are provided,

including the athletic training room, athletic practices, and competitive events (NATA, 1999).

National Athletic Trainers' Association (NATA). The professional membership association for certified athletic trainers and others who support the athletic training profession (NATA, 1999).

Summary

Knight (2006) stated that "All the knowledge in the world is of no value if it cannot be applied" (p. 15). Athletic training is the application of knowledge, and without good clinical education, the value of classroom education is weakened (Knight, 2006). If designed and implemented based on current standards, clinical education programs have the opportunity to prepare successful athletic training candidates for entry-level positions. In the past, clinical experiences have meant that candidates learned by chance while being socialized into the profession. Currently, clinical education has come to the forefront for revision and reform.

For many years, clinical education was regarded as a professional socialization process, rather than an authentic learning experience (Delforge & Benhnke, 1999). The athletic training candidates provided a workforce, while accepting an institution's values, interests, skills, and knowledge (Melia, 1987). Although professional socialization is an important aspect of clinical education, it should not be the major goal on training methods (Bradby, 1990). Throughout athletic training education reform, clinical education transitioned from the apprentice/internship model to a competency-based education model (Weidner & August, 1997). The athletic training reform was necessary if the profession wanted to stay on pace with the ever-changing health care system (Booth, 1999; Koehneke, 2001).

Chapter 2: Literature Review

Formal clinical education in athletic training education programs has recently gained considerable attention. Clinical education has experienced significant transformation, including "expanded cognitive domains and psychomotor skills" (Geisler & Lazenby, 2009). Current clinical experiences are intended to improve the clinical competency of entry-level professionals in an array of diverse settings (Geisler & Lazenby, 2009). Therefore, the purpose of this literature review is to explore the historical perspectives behind athletic training education reform, characteristics that make an effective clinical instructor, clinical standards development, and the logical model evaluation.

Historic Perspective

In comparison with other allied health professional organizations, the National Athletic Trainers Association (NATA) is relatively young (Mangus, 1998). The NATA was established in 1950 in Kansas City to "build and strengthen the profession of athletic training through the exchange of ideas, knowledge, and methods of athletic training" (O'Shea, 1980, p. 50). Athletic training has had astonishing growth in a short period of time (Starkey, 1997). The training preparation programs evolved at a slower pace (Starkey, 1997). The development of the NATA and evolution of athletic training education are tightly intertwined. Therefore, to understand the framework and progression of athletic training education, it is vital to examine the history and development of the NATA (Delforge & Benhnke, 1999).

The profession of athletic training began with the formation of the intercollegiate and interscholastic sports programs in the late 19th century (Hillman & Perrin, 2005). The early athletic trainers were considered jacks of all trades. They were described as

"uneducated and scantily trained," using techniques that involve counterirritants and home remedies (Prentice, 2005, p. 15). With the expansion of intercollegiate sports programs in the United States, a demand for competent trainers heightened (Ebel, 1999). In 1916, Samuel Bilik published the first text devoted solely to athletic training. "Professionals and crafts die in infancy unless someone who knows how to execute them is willing to share that knowledge" (Ebel, 1999, p. 11). The emergence of text books and monthly publications by pioneers of the profession were considered the first indication of the growth of this profession (Dondanville, 2005).

In the years leading up to World War I, a national organization for athletic trainers was formed (Ebel, 1999; Hillman & Perrin, 2005; Hunt, 1998). However, disruptive effects of the war and regional internal strife (Ebel, 1999) were responsible for its fold prior to World War II (Delwiche & Hall, 2007). Although its existence was brief, it was an important first step in professional identity (Hillman & Perrin, 2005). In 1950, with the help of the Cramer brothers, athletic trainers tried again to form a lasting professional organization (Ebel, 1999). They succeeded in forming the National Athletic Trainers' Association (NATA) (Delforge & Benhnke, 1999; Ebel 1999; Hunt, 1998). Chuck Cramer said with enthusiasm:

> The fastest growing organization in the athletic field today is the NATA. These men are charged with the responsibility of pioneering a profession…and a grand one, too. Today…our colleges are beginning to give majors in athletic training. True, there are only six colleges doing this today, but the long range program of this group of several hundred trainers will little by little dig into a picture and establish a profession that is indeed essential and will someday be a part of every school in this nation. (as cited in Ebel, 1999, p. 13)

In 1955, William Newell was named the first executive secretary. He helped

evaluate the profession through his advocacy of education and dedication to focus

attention on the profession's advancement. One of his first acts was to appoint the

Committee on Gaining Recognition with his goal of advancement in mind. The

Committee on Gaining Recognition was the ancestor of today's NATA Professional

Education Committee (Delforge & Benhnke, 1999). This group strove to develop a model

curriculum for professional preparation. It was during this time that the NATA began

establishing standards for accreditation, and the Committee on Gaining Recognition was

the established forum for athletic training education in its infancy years.

Through the 1950s, athletic training achieved both professional and educational

benchmarks. In 1956, the *Journal of Athletic Training* was established (Ebel, 1999; Hunt,

1998), and in 1957, a code of ethics and alignment with the National Collegiate Athletic

Association was adopted (Ebel, 1999). To finish the decade on a positive note, the first

curriculum model for athletic training education was adopted in 1959 (Delforge &

Benhnke, 1999; Hunt, 1998). The first recognized educational curriculum in athletic

training was not based on an exclusive body of knowledge; instead, it was comprised of

existing courses offered in health and physical education departments (Delforge &

Benhnke, 1999). The curriculum required the students to complete the courses needed to

obtain teaching credentials in physical education or health education. The students were

strongly encouraged to complete the necessary prerequisite course work required to enter

a physical therapy postgraduate program to serve a greater range of the population

(Delforge & Benhnke, 1999; Ebel, 1999).

The 1960s are commonly thought to be void of education development (Delforge

& Benhnke, 1999) and identification. The findings of a 1968 survey of college deans and

department heads (Ebel, 1999) found that 53.8% of department heads of physical

education and recreation departments were not aware of the 1959 athletic training

education curriculum and associated athletic training education programs (ATEPs) (Ebel,

1999; Miller, 1999). Based on the results of the survey, the NATA sought specific

athletic training curricula through which schools/programs could seek approval, carry out

certification by means of a standardized exam that measured a candidate's entry-level

competence, and convince high school administrators and boards of education of the need

for teacher-athletic trainers on the secondary level (Ebel, 1999). Based on these three

goals, the Subcommittee on Curricular Development determined that 42 institutions in

the country had prospective ATEPs (Ebel, 1999; Miller, 1999). By 1969, the Committee

on Gaining Recognition had split into the Subcommittee on Professional Education and

Subcommittee on Certification (Delforge & Benhnke, 1999). Of the 42 potential athletic

training education programs, only four institutions submitted their curricula to the

Subcommittee on Professional Education. After being evaluated, programs at Mankato

State University, Lamar University, Indiana State University, and the University of New

Mexico were recommended and became the first undergraduate athletic training

education programs to be approved by the NATA (Delforge & Benhnke, 1999; Delwiche

& Hall, 2007; Ebel, 1999). The one crucial step needed in the transition from trade to

profession, the national certification process, would take place in the following year

(Ebel, 1999).

　　　　In recent years, there has been much discussion of a possible certification

examination for the NATA. Many feel that such a practical and written evaluation is the

best answer for the immediate problems of professional preparation within the

association. According to many professionals, "such an examination would give our

association a unity of purpose and direction at a time when it is sorely needed" (Lindsey McLean as sited in Ebel, 1999, p. 35).

With the development of the first certification examination in 1970, athletic training education and national certification began to form "parallel, complementary paths to future growth and development" (Delforge & Benhnke, 1999, p. 55). While all the research indicates that a certification exam was developed and implemented in this timeframe, several respected authors disagree about dates and prerequisites for certification. For example, Delforge and Benhnke (1999) and Ebel (1999) claimed that the first exam was given in 1970, while Grace (1999) asserted that it was given months prior in August 1969. The authors also disagree about the routes to certification with Ebel (1999) claiming three possible routes; Delforge and Benhnke (1999), four routes; and Grace (1999) declaring five. Of these different options, the three most common paths to certification eligibility were graduation from a NATA approved undergraduate program, participation in an apprenticeship program, and graduation from a physical therapy postgraduate program (Delforge & Benhnke, 1999; Ebel, 1999; Grace, 1999).

The 1959 education model continued with only minor revisions and the addition of the clinical experience requirements; the 1970s were the time of great proliferation of ATEPs (Delforge & Benhnke, 1999). Between the years of 1969 and 1982, the number of approved undergraduate programs increased by 78. With this expansion and the declining teaching opportunities in health and physical education, the NATA revised the teacher education component of the curriculum to reflect professional preparation in any subject leading to a teacher certification. By diminishing the dependence on physical education, health pedagogy, and prephysical therapy programs, athletic training programs were able to develop opportunities to study a distinct athletic training curriculum. As program

directors strove to reduce irrelevant content, the subject matter started taking on a distinctiveness of its own (Delforge & Benhnke, 1999). Milestones in 1970 also included Texas becoming the first state with licensure, the first female candidate taking the NATA exam, and the implementation of continuing education requirements for all athletic trainers beginning in 1978 (Ebel, 1999).

The 1980s started off in full force. Bud Miller, then the chair of the Professional Education Committee, began campaigning for approved programs to offer a major in athletic training (Delforge & Benhnke, 1999). This realistic goal was slated to be implemented by 1986 and stimulated positive growth. However, the deadline was not solid and extended to July 1, 1990 (Delforge & Benhnke, 1999). The first sign of new growth appeared between 1981 and 1982 when the first Role Delineation Study was completed by the NATA (Delforge & Benhnke, 1999; Ebel, 1999). Along with the Role Delineation Study, the NATA also published the Competencies in Athletic Training. These two documents helped define and describe the specifics of knowledge and skills needed by an entry-level professional (Delforge & Benhnke, 1999). In 1982, the NATA Board of Certification (NATABOC) formed as an administratively self-governing body from the NATA and became the first allied health organization in sports medicine to become accredited by the National Commission for Health Certifying Agencies (NCHCA) (Grace, 1999). In 1983, the foundation for education program development was established with the writing of the Guidelines for Development and Implementation of the NATA Approved Undergraduate Athletic Training Education Programs. With all the events taking place, the NATA permanently secured their professional identity by trademarking the letters ATC and CAT to solely refer to a certified athletic trainer. The next step in moving the athletic training profession forward was yet to come –

accreditation.

Certification goes hand-in-hand with education (Hunt, 1998) and independent program approval is essential for professionalization (Delforge & Benhnke, 1999). In 1988, the NATABOC authorized the Professional Education Committee to seek accreditation through the American Medical Association (AMA) and the Commission on Allied Health Education and Accreditation (CAHEA) (Delforge & Benhnke, 1999; Ebel, 1999). Two years later in 1990, two important events took place: The NATABOC became fully independent of the National Athletic Trainers Association (Ebel, 1999), and the Council on Medical Education determined that athletic training met the criteria to be recognized as an allied health profession by the AMA. With this acknowledgment, the Joint Review Committee-Athletic Training (JRC-AT) was formed. The JRC-AT was established at this time to "develop standards and guidelines governing JRC-AT review and CAHEA accreditation of entry-level preparation programs" (Ebel, as cited in Peer & Rakich, 2000, p. 189). Early on, members of the JRC-AT included the American Academy of Family Physicians, the American Academy of Pediatrics, American Medical Association, and the National Athletic Trainers Association (Delforge & Benhnke, 1999; Ebel, 1999). In 1995, the American Orthopedics Society for Sports Medicine joined the JRC-AT (Delforge & Benhnke, 1999).

The Commission on Allied Health Education and Accreditation (CAHEA) endorsement was a major milestone for athletic training education. However, within a short period of time the CAHEA was disbanded and a new independent accreditation agency was selected as the accrediting board for athletic training education (Delforge & Benhnke, 1999; Ebel, 1999; Peer & Rakich, 2000). During this transition, the NATABOC noticed the growing competition in the workplace, differences in the

candidate preparedness on the NATABOC exam, and the diverse entry-level career options. These factors helped to establish the Educational Task Force in 1994. The main purpose was to specifically speak to the educational issues that would take the NATA into the 21st Century (Peer & Rakich, 2000); to identify major issues; to analyze future challenges; and to make recommendations to improve and standardize entry-level, graduate, and continuing education (Delforge & Benhnke, 1999; Ebel, 1999; Peer & Rakich, 2000). These recommendations were approved in 1996, and the NATA established a permanent Education Council to supervise their implementation and provide leadership and vision (Delforge & Benhnke, 1999; McMullan, 1997; NATA, 1999; Recommendations, 1997; Starkey, 1997).

Athletic training as a profession had come a long way in such a short amount of time. By 1999, four role delineation studies (Weidner & Henning, 2002a) that described the current practice of athletic training and defined the content for the certification exam had been completed (Defining, 2002). The changeover from NATA-approved to Commission on Allied Health Education Program (CAHEP) accredited education programs was complete (Delforge & Benhnke, 1999); and the third edition of the Entry-Level Competencies for the Physically Active had been written, recognizing 12 domains (Defining, 2002; Education Council, 1999; Leaver-Dunn, 2002; Starkly, 1998; Weidner & Henning, 2002a). The NATA membership had exploded to 25,000 members in 1999, up from a mere 1,000 in 1965 and 10,000 in 1986 (Ebel, 1999). After 30 years of educational development and leadership, the Professional Education Committee disbanded in 1998 (Delforge & Benhnke, 1999). The Professional Education Committee and the Educational Task Force's impact on the athletic training education programs is still relevant today.

Athletic Training Reform

  Athletic training education reform began in a positive direction when the NATABOC approved the education Task Force's 18 recommendations in late 1996. One of the most significant changes came with the elimination of the internship route to certification and the expectation that all athletic training candidates for the certification exam must graduate from an accredited program as of 2004. Removal of the internship route came about due to the lack of uniformity and consistency in the entry-level preparation of undergraduate candidates (Craig, 2003; Peer & Rakich, 2000; Weidner & Henning, 2002a). With only one route for certification, the athletic training professional credibility in the allied health care community increased and impacted the third party reimbursement and licensure efforts in a positive manner (McMullen, 1996; Peer & Rakich, 2000). The Task Force sought to combine the apprentice-style learning's strongest attributes with those of the traditional curriculum program (Hunt, 1998; Leverenz, 1998; McMullin, 1997; Starkey, 1997).

  The belief that all genuine learning comes about through experience does not mean that all experiences are genuinely or equally educative. "Experience and education cannot be directly equated to each other. For some experiences are mis-educative. Any experience is mis-educative that has the effect of arresting or distorting the growth of further experience" (Dewey, 1938, p. 25). The goal of moving away from the internship athletic training programs was to insure standardization as well as to safeguard athletic training candidates. Athletic training candidates in the past were being used as an income-free labor force by many athletic departments and administrators (Weidner & Henning, 2005). Along with eliminating the improper use of athletic training candidates, the task force advised a revaluation of the clinical hours the candidates needed to be

eligible to take the certification exam (Recommendations, 1997). The NATA announced

that the focus of clinical education would be on the quality of the experience, not the

quantity of time spent in the clinical setting. As a result, beginning with the 2002-2003

academic year, clinical hours would not be required for certification (Cagle, 2001).

Along with the modification in contact hours came the expansion of the clinical

settings. The task force suggested an investigation on how diverse practice settings were

being integrated into athletic training education programs. With a varied clinical

experience the candidate's education is heightened, and knowledge base and skill level

can be expanded beyond the collegiate athletic training room. These attributes are

important for preparing the candidates to compete with an ever-evolving patient base and

work environment.

The task force established the education council as a clearing house for

educational policy, improvement, and delivery to our profession. The education council

developed the third edition of the educational competencies that described the cognitive,

psychomotor, and affective entry-level requirements across 12 domains (Defining, 2002;

Education Council, 1999; Henning & Weidner, 2008; Starkey, 1997; Houghlum &

Weidner, 2001). These competencies were then broken into proficiencies that candidates

must master during their clinical education experience. With proficiencies established

and implemented, clinical experiences are now based on measurable performance

objectives and the concept of learning over time (Defining, 2002; Education Council,

1999; Houghlum & Weidner, 2001; Starkey, 1997; Weidner & Henning, 2002a).

Students now have the opportunity for meaningful clinical instruction where educational

competencies and clinical proficiencies are taught, practiced, and evaluated in and

outside of the classroom (Cagel, 2001; Houghlum & Weidner, 2001; Koehneke, 2001;

Peer & Rakich, 2000; Starkey, 2002; Weidner & Henning, 2002a). The transition to competency-based education has transformed the clinical experience (learning by chance) into clinical education (Denegar & Hertel, 2002; Starkey, 2002; Weidner & August, 1997; Weidner & Henning, 2002a).

The competency-based educational model is based on cognitive knowledge, psychomotor skills, affective professional behaviors, and clinical proficiencies (Weidner & August, 1997). Under the competency-based model, the clinical instructor (CI) is responsible for instruction and evaluation of athletic training proficiencies over time (Koehneke, 2001). Clinical education is a key component of professional preparation in allied fields (Curtis, Helion, & Domsohn, 1998; Knight, 2002). It gives students the opportunity to transform from novice candidates to competent and confident professionals (Weidner & Henning, 2002a). Allied Health instructors need to provide the skills and framework for the candidates to use critical thinking skills (Geisler & Lazenby, 2009) as well as increase the accountability and task complexity as a student's master content and skill increase (Knight, 2002). Clinical instructors should minimize learning by chance (Geisler & Lazenby, 2009) which is prevalent in clinical education as a result of randomization of patient loads and uncontrollable factors and experiences. Classroom knowledge and theory should be incorporated into the practical experience (Weidner & August, 1997; Weinder & Henning, 2002a). It is thought that the transition of knowledge from classrooms to practical application is necessary to ensure skill mastery (Weidner & August, 1997).

Along with the undergraduate program transformation, the need for reform of graduate studies was also recommended. Due to disparities among the undergraduate athletic training preparation programs and loss of the internship route, post-baccalaureate

programs were encouraged. The task force felt that it was a critical recommendation that gave unconventional means to certification for those candidates who decided to enter the athletic training profession later in life or for those who did not attend an accredited program (Delforge & Benhnke, 1999; Ebel, 1999; Hunt, 2000; Leverenz, 1998; McMullan, 1997).

Additional recommendations that played a significant role in athletic training educational reform included the development of certification of advance qualifications (CAQ) and the encouragement of multi-disciplinary programs. The task forces recommended two different types of CAQ: one focused on becoming an Approved Clinical Instructor (ACI) and the other associated with post entry-level knowledge and skills. With an increasing responsibility to provide high quality clinical instruction and supervision, the creation of the Clinical Instructor Educator (CIE) was considered necessary. The Clinical Instructor Educator was responsible for workshops to guide athletic trainers in the clinical setting and help them provide purposeful education to candidates in practical situations. The CIE workshop's main focus was to improve the quality and consistency of clinical education (Starkey, 1997; Walters, 1999; Walters & Weidner, 2002; Weidner & Henning, 2002a), since not all great clinicians are great teachers (Weidner & Henning, 2002b). By completing the pedagogy-focused workshop, the clinicians were considered Approved Clinical Instructors (ACI) by the Task Force. The attempt to make all clinical instructors teaching in an accredited athletic training education program an Approved Clinical Instructor (ACI) helped the clinician manage both the role of clinical instructor and athletic trainer (clinician). Regrettably, many clinical instructors are still primarily responsible for patient care (Martin, 2001; Weidner & Henning, 2002b), making the balance between the students' clinical education and

their workload with student athletes hard to define (Weidner & Henning, 2002a).

Early medical education models focused on the student as an apprentice who trained with a master practitioner (Weidner & August, 1997). Like these early medical models, an athletic training candidate's education was often influenced by the instructor's strengths and weaknesses (Weidner & August, 1997). Learning though socialization is important in professional preparation; however, accumulating hours weakens the student's knowledge base (Knight, 2002). Educational reform became necessary if the athletic training profession wanted to keep up with the ever-changing face of healthcare (Booth, 1999; Koehneke, 2001). Strengthening the quality, reputation, and educational requirements of the ATC credential helped the NATA promote its members as experts. The members would be able to practice in diverse settings without working beyond the respective scope and extent of their professional preparation (Starkey, 1997). To accomplish such an objective, athletic training clinical education must be equivalent to other respected allied healthcare professions. This parallel will be achieved with clinical instructors and the use of effective instructional delivery.

Allied Health Clinical Education

In its beginning, allied health clinical education was amorphous and trade-like (May, 1999). Today, degree-based educational programs operate around standardized curricula (Cross, 1994). Learning through role modeling and on-the-job observation (Round, 1999) has been slowly replaced by active teaching and learning in a clinical environment (Cross, 1994; Gorden et al., 2000; Richards, 1982). The new focus is on a student's ability to apply abstract theoretical knowledge (Morgan & Knox, 1987; Williams & Webb, 1994). Guided instruction gives the student an opportunity to be successful in the transfer of classroom knowledge to the practical setting (Lauber et al.,

2003; Morgan & Knox, 1987; Williams & Webb, 1994), along with empathy. "It is imperative that clinical educators activate observation through systematic planning of their actions and the student to participate in patient care up to their ability" (Dondanville, 2005, p. 23).

Shadowing and observing professionals and advanced students are the cornerstones for exposure to patient care in all allied health fields (Kachur, 2003). Along with the exposure to real life scenarios, candidates who observe without interaction will quickly disengage from the clinical experience; as a result they may appear to be resentful of the time obligation without authentic learning taking place (Kachur, 2003). The gap between theory and practice can be closed by clinical educators that familiarize the candidates with the expectations, clinical site, selected reading, and lab skill prior to observation. Along with the pre-observation activities to orientate the candidates, post-observation actions such as open discussion, reports, portfolios, skills practice, and follow up reading assist in the development of a conceptual framework (Kachur, 2003).

The traditional apprenticeship model of clinical education used observation and feedback as the means of educating the student (Eaton & Cottrell, 1999): see one, do one, teach one (Kachur, 2003). Modern clinical education focuses on the small sequences that make up the complex skills needed for task mastery. These sequences are learned individually and re-integrated to ensure that students are proficient at each task. Eaton and Cottrell (1999) proposed a common learning structure that acknowledges five distinct steps, and is used to enhance motor performance and cognitive interpretation:

1. The clinical instructor demonstrates the skill to the students.

2. The students and the instructor discuss each step.

3. The clinical instructor demonstrates the skill again.

4. The students engage in active practice of the skill steps while talking through it.

5. The students practice the skill silently.

Clinical education is not always a success; many students have a difficult time applying theoretical knowledge in the practical setting (Tanner, 1998). Kirkpatrick found in his 1999 study that when the education and service settings are separate, students often have difficulty making the links from theory to practice. They lack practitioners as role models and students very often perceive faculty as theoreticians unable to practice and practitioners as technicians unable to relate theory to practice.

The link between patient care and didactic learning is being introduced earlier in the students' education through the use of vertically integrated curricula and problem-based instruction (Gordon et al., 2000). This early engagement in clinical education will allow the students to combine knowledge and skills application (Gordon et al., 2000) while maximizing the benefits of patient contact time (Kachur, 2003). However, prior to complex skills being proficient and applied on patients, the clinical skills are to be refined with practice in practicum labs (Eaton & Cottrell, 1999; Kneebone et al., 2002). Laboratory-based instruction is essential in teaching students concrete skills; however, with the concentration being on skill improvement, the development of the communication can be overlooked (Kneebone et al., 2002).

Allied health programs have an obligation to provide substantial evidence that learning occurred and that candidates enrolled in their program met a common expectation of competence. Assessment tools that are presently in use measure quantitative data such as knowledge and clinical skills, but do not take into account professional attributes. In an era of accountability, many programs include qualitative

measures to assess effective communication, integrity, selflessness, ethics, and patient consultation skills (Murray, Gruppen, Catton, Hays, & Woolliscroft, 2001).

Assessing Clinical Education

The need for the students to perform independently and make decisions that are necessary for the autonomous practice has sparked a need for better instructor preparation, educational design, and assessment tools in clinical education (Collins, 2003; Ladyshewsky, Barrie, & Drake, 1998). There is also a growing need for additional information that ensures optimal communication and learning (Gordon et al., 2000; Hesketh et al., 2001).

Due to the increase in accountability within the medical community, the collegiate allied health programs must prove validity and reliability of their educational products. Objectives and outcome-based education have become measuring tools for many of these collegiate educational programs. Content, instructional methods, and assessments are determined by the skill and qualities the teacher expects the candidates to achieve (Hesketh et al., 2001). In the academic world, accrediting bodies set educational standards. These accrediting agencies then accumulate instructional course evidence of compliance. In many cases these educational standards fail to be included in the clinical curricula due to the opposition of educators. Many educators interpret these objectives as too broad, narrow, or perplexing (Mcleod, Berdugo, & Meagher, 1998). However, the objective's possible effectiveness in defining performance expectations is acknowledged by athletic training education program directors and candidates (Mcleod et al., 1998). In order to achieve buy-in throughout the programs, learners and educators need to have an active role in determining objectives (Mbambo, 1999; Mcleod et al., 1998).

The most important aspect of teaching is determining if the students are learning

what you planned to teach (Walsh, Kugler, & Bennet, 2003). In allied health education

programs, individual accrediting bodies specify the types of patient contact required for

entry-level clinical competence; however, they fail to clarify the nature and extensiveness

of those exposures (Strickland et al., 1996). As a result, assessment of clinical skills

varies widely between programs and disciplines (Turcoy, Comfort, Perrin, & Gieck,

2000). Some programs tracked the number of patient hours each candidate accumulates

(Laurent & Weidner, 2001); however, hours alone do not validate the clinical experience

or guarantee that genuine learning has taken place (Strickland et al., 1996). Instead of

focusing on the amount of hours, supervisors should evaluate the quality of the

experience (Turcoy et al., 2000; Williams & Webb, 1994), and place emphasis on

comprehension, skills, and abilities (Turcoy et al., 2000) required in real life situations

(Murray et al., 2001).

"Clinical education also provides the opportunity for practicing clinicians to

mentor future professionals' development and refinement of knowledge, skill, and

clinical decision making within the culture of the profession" (Barnum et al., 2009, p.

26). The majority of educators declare clinical education as a critical aspect for the

advancement of health science and patient care (May, 1999). Weakness in this stage of

professional education is potentially destructive as candidates are weaned from the

reliance on their clinical instructors (Collins, 2003). Two of the most potentially

menacing assumptions about clinical education regard the students as consumers (Gordon

et al., 2000; May, 1999; Strickland et al., 1996). Other issues that could have a negative

impact on clinical rotations are decreased time for skill practice, inconsistent quality in

teaching and assessment, and the lack of a professional role model (Gordon et al., 2000).

Clinical Supervision

"Learning the culture of a profession is not the same as learning the knowledge and skills necessary to practice a profession" (Barnum et al., 2009, p. 17). Supervision can occur informally, one-on-one, between peers, or in a group situation (Kilminster & Jolly, 2000) and can be separated into two distinct categories: program administration and clinical education (McCrea, 2003). As student diversity increases, workplace demands change, societal expectation grows, and clinical supervision becomes intricate and focused on education (McCrea, 2003). Clinical instructors should deliver information that is appropriate to the candidate's knowledge base, experience, and competency level. Instructors should provide accommodations for individual differences and expectations in both the learner and clinicians. Clinical educators need to go beyond the how to do athletic training, nursing, or medicine (Giesler & Lazenby, 2009). They need to set a framework for critical thinking, decision making, and problem-solving skills (Mbambo, 1999; McCrea, 2003).

Clinical supervision can take place in different settings under various methods of delivery (Kilminster & Jolly, 2000; Kirkpatrick, Byrne, Martin, & Roth, 1991); however, the most important aspect of clinical education is quality teacher and student interactions. Kirkpatrick et al. (1991) and Miller (1999) found that a majority of the candidate's time was spent unengaged or doing managerial duties that have little to do with learning. This pattern can hinder the underlying goal of making the student gradually more self-sufficient. The clinical supervisors should directly observe the student-patient interaction, demonstrate proper treatment techniques, and mentor the student without arrogance (Strickland et al., 1996).

Quality clinical supervision is essential if candidates are to effectively bridge the

gap between theories and practice (Grealish & Carroll, 1998; Laurent & Weidner, 2001; Meyers, 1995) and solidify their professional uniqueness (Kirkpatrick et al., 1991). Supervision should be well thought out (Kilminster & Jolly, 2000; Meyers, 1995) and built upon learning objectives, and personal development goals (Kilminster & Jolly 2000). The scope and accessibility of supervision has been identified as a problem across many professional education programs (Kilminster & Jolly, 2000; Pertab, 1999), as well as the lack of role models and unaccommodating teaching-learning environments (Kirkpatrick et al., 1991). The clinical experience can also be enhanced by good communication, rapport, mutual trust, and respect (Kirkpatrick et al., 1991).

The Clinical Educator

The clinical experience is considerably different from the classroom (Williams & Webb, 1994), and memorization of facts does not make a candidate an effective clinician (Round, 1999). The didactic and clinical education experiences should complement each other and be properly sequenced (Williams & Webb, 1994). Candidate engagement, patient interaction, self-reflection, and individual practice are critical for authentic learning to occur (Richards, 1982). Quality clinical instructors guide candidates through empirical learning in an ongoing process of providing direction and feedback (Barnum et al., 2009; Harrelson, 2002).

Clinical education has the utmost impending impact on a student's application of his/her education to real life situations (Dagget, Cassie, & Collins, 1979: Grealish & Carroll, 1998). Through sustainable feedback (Cross, 1994; Gordon et al., 2000; Laurent & Weidner, 2001), students mentored by expert clinicians will refine their clinical and communication skills (Sanders, Melzer, Boucher, & Keely, 1999). Clinical instructors have the power to stimulate learning in the cognitive, affective, and psychomotor

domains (Gordon et al., 2000; Lauber et al., 2003; Tanner, 1998), while developing critical thinking, decision making, and problem-solving skills (Laurent & Weidner, 2001; Morgan & Knox, 1987; Round, 1999; Tanner, 1998).

Clinical educators not only give students opportunities to integrate theoretical and practical knowledge, but they help candidates develop a sense of social responsibility and importance of moral and ethical practice. Professional interaction, modeling, cooperative and individual practice are encouraged to develop the student's professional skills (Ladyshewsky et al., 1998). In the past, the academia and clinical aspects of the athletic training program were one in the same; however, due to educational reform, academia provides the knowledge and the clinical aspect is responsible for the socialization and introduction to the field by supervising clinical experiences (Starkey, 2002).

Characteristics of Clinical Instructors

While clinical instructors are proficient in their field, they may lack a pedagogical background (Brownstein, Rettie, & George, 1998; Richards, 1982) depending on their own experiences and socialization (Brownstein et al., 1998). Clinical instructors are responsible for the delivery of clinical experiences that provide the student with maximum learning time, prompt feedback, and correction of improper behavior and techniques (Commission on Accreditation of Athletic Training Education, 2009). Many times the instructor is both the practitioner and the educator (Richards, 1982). This dual appointment sets the instructors up for role strain (Henning & Weidner, 2008) as they aim to balance the responsibility of patient care and clinical education.

Just as the most important job for the clinician is to insure injured patients are in an optimal environment for healing, the clinical instructor must also value putting candidates in situations where success and learning are possible. Teaching behaviors that

are associated with highly effective clinical instruction are the availability and willingness to help students learn through nonthreatening questioning, demonstration of professional behaviors, frequent discussion of applications, sharing knowledge and experience, and sustainable feedback (Curtis et al., 1998).

Clinical instructors serve an important role in the facilitation and integration of knowledge and skill (Laurent & Weidner, 2001), as well as serve as professional role models (Bennett & Kitsell, 2003; Brehaut, Turik, & Wade, 1998; Morgan & Knox, 1987). With the overlapping responsibility of the clinical instructors, it is understandable that lack of time may be a barrier for successful implementation of clinical education (Ducan & Wright, 1992; Jarski, Kulig, & Olson, 1990; Perrin & Lephart, 1988; Staurowsky & Scriber, 1998).

Research has identified serious supportive and hindering clinical teaching behaviors (Curtis et al., 1998) in the clinical setting. With the amount of work that is placed on the clinical instructor and the little time available to instruct, the clinical instructor needs to encompass certain characteristics to enhance the candidate's learning experience in the clinical setting.

Communication Skills

Time after time communication skills have been found to be a vital factor for clinical education. Laurent and Weidner (2001) indicated that communication of expectation for candidates was found to be a helpful characteristic of clinical instructors. Clinical instructors should demonstrate active listening skills and use open-ended questioning techniques. This demonstrates a genuine interest in the candidate, which will create a constructive relationship between the candidate and instructor (Dunlevy & Wolf, 1992; Emery, 1984; Laurent & Weidner, 2001). Swann (2002) identified communication

as one of the essential components of a clinical education program. If there is not sufficient communication, the clinical education process is fated for failure.

Interpersonal Skills

Research on interpersonal skills in clinical education has taken place in the nursing field. It has been presented that an effective clinical instructor should have effective interpersonal skills (Dunlevy & Wolf, 1992). Interpersonal skills are integral in making the student feel valued as a person (Dunlevy & Wolf, 1992). An example of interpersonal skills is the clinical instructor's ability to interact with candidates with enthusiasm, friendliness, honesty, and receptiveness (Dunlevy & Wolf, 1992; Morgan & Knox, 1987; Nehring, 1990). Effective clinical instructors should be able to model appropriate and professional interpersonal relationships when interacting with others (Weidner, 2005).

Weidner & Henning (2002a) defined clinical instruction as the thoughtful, practical teaching of psychomotor skills and professional behaviors with the primary focus on the candidate rather than the patient. This is one factor that differentiates athletic training education from other medical preparation programs. Swann (2002) identified that *community pathway* as a communication process that starts with the clinical instructor and then proceeds directly to the patient, or the student. It is the clinical instructor's responsibility to guide the student in becoming a competent clinician while providing a safe environment for both the student and the patient.

Supervisory and Administrative Skills

Meyer (2002) noted that leadership skills and supervisory abilities have a direct influence on whether a clinical instructor is considered effective or not. The clinical instructor should be able to relate to students at their current educational level. This will

allow the clinical instructor to encourage candidates to arrive at clinical decisions on their

own, according to the candidate's level of education and experience (Weidner &

Henning, 2005). Clinical instructors need to present and define clear performance

expectations to the candidates at the beginning of, and throughout the learning experience

(Weidner & Henning, 2002b). Supervision is of the utmost importance during formal

acquisition, practice, and evaluation of the entry-level athletic training proficiencies.

Quality direct supervision can be defined as direct observation within eyesight and

earshot, feedback directly related to performance of skill, discussion with others, and

reviews of patient documentation (Laurent & Weidner, 2001; Weidner & Henning,

2002b). Clinical instructors should maintain a balance between providing feedback and

fostering student autonomy (Anderson, Larson, & Luebe, 1997; Irby, Ramsey, Gillmore,

& Schaad, 1991).

Along with direct supervision, there are various administrative interrelationships

among the clinical instructor, candidate, clinical setting, and the academic program that

must be attended to (Weidner & Henning, 2002b). Candidates should be informed of all

policies, procedures, and expectations of the clinical education program and clinical

settings (Weidner & Henning, 2002b). The clinical instructor also needs to provide the

program director with needed materials for accreditation.

Logic Program Evaluation

Using a program evaluation method, quality standards are outlined, relevant data

are gathered, and outlined standards are applied to determine quality and effectiveness of

the program (Fitzpatrick et al., 2004). The results and recommendation from the program

evaluation were shared with the athletic training program director, clinical instructional

educator, approved clinical instructors, and the dean of the sports science department.

Therefore, the study took an objective-oriented evaluation approach. Using the logic

model allows the stakeholder to identify how adequate each aspect (specific inputs,

actives, outputs, and outcomes) of the program is, the strength and limitation of each

aspect, and the changes in each aspect that may improve the program (Fitzpatrick et al.,

2004). The athletic training education program director approved this study prior to the

beginning of the research for this program evaluation (see Appendix A).

The unique feature of an objective-oriented evaluation approach is that the

purpose of a number of activities is specified, and then the evaluation focuses on the

degree to which the purpose is achieved. The data obtained from an objective-oriented

evaluation from the study was used to "reformulate the purpose of the activity, the

activity itself, or the assessment procedures and services used to determine the

achievement of purpose" (Fitzpatrick et al., 2004, p. 71).

Practitioner guides to the logic model evaluation have built on the concepts

underlying Provus's Discrepancy Evaluation Model. Provus's approach stayed true to the

Tylerian belief which defined evaluation as the process of determining the degree to

which objectives of a program are in reality being attained. Provus viewed evaluation as

"the watchdog of program management" and the "handmaiden of the administration in

the management of program development through sound decision making" (Fitzpatrick et

al., 2004, p. 186). His approach was based on his evaluation of public schools in

Pittsburgh, Pennsylvania, and although in some ways he had a management-oriented

approach, the key characteristic of Provus's proposal stemmed from the Tylerain

tradition. Provus viewed the evaluation as the process of determining standards and

discrepancies, and gathering information about discrepancies to make decisions to

improve, maintain, or terminate the program or some aspect of it (Fitzpatrick et al.,

2004).

Structured around the concepts of the Discrepancy Evaluation Model, the logic model is an effective method for charting progress toward interim and long-term outcomes. A logic model is a picture of how a program works – the theory and assumptions underlying the program. A program logic model links outcomes (both short- and long-term) with program activities/processes and the theoretical assumptions/principles of the program. This model provides a roadmap of the program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved.

In order to answer the research questions of the study, an athletic training education program at a private university in rural North Carolina was evaluated. Qualitative and quantitative methods were utilized, enabling the study to take a mixed method approach to determine the alignment of an undergraduate athletic training preparation program to clinical standards developed by Ball State University and funded through the NATA Education and Research Foundation. Qualitative and quantitative data were gathered, recorded, analyzed, and reported using a researcher-created validated survey. Mathieu, Raetzo, Junod, and Vu (2000) stated that this multi method approach has been challenged due to the theoretical difference. However, it is thought that when both qualitative and quantitative paradigms are understood and intergraded, "the depth of knowledge in athletic training can expand" (Pitney, 2001, p. 189). This type of understanding can have a positive influence on patients, athletic training students, and educators.

An objective-oriented program evaluation was utilized in the study concentrating on the logic model. According to Fitzpatrick et al. (2004), the logic model starts with a

long-term vision of how program participants will benefit from the program. This program evaluation requires analyzing program inputs (budgets, staff), activities (curriculum, clinical services), outputs (participation), and outcomes (short, intermediate and long-term goals). The logic evaluation model gives the stakeholders the ability to determine the status of the clinical education aspect of the ATEP. This allows the stakeholder to develop a strategic plan to meet objectives.

Chapter 3: Methodology

Introduction and Restatement of Purpose

The purpose of the study was to evaluate an athletic training preparation program and to determine to what extent the preparation program aligns with the Clinical Education Standards that were funded by the National Athletic Association Research Education Foundation. An extensive literature review revealed the importance of clinical education and the role of the clinical instructor when preparing athletic training candidates for entry-level positions following graduation. Specific behaviors in clinical supervision were perceived essential by students and instructors. The following behaviors included in the literature review were sustainable feedback, appropriate interpersonal relationships, and communication and information delivery.

Demographics of Study

Participants of the study included all candidates currently accepted into the athletic training preparation program, representing the junior and senior levels. The athletic training candidate applied for acceptance into the program their second semester. The candidate was granted full entrance their sophomore year. Only those candidates that were fully accepted and entering their junior and senior year were asked to complete the Evaluation of Athletic Training Approved Clinical Instructors (EATACI) student/peer assessment form to obtain their perceptions of their clinical instruction. These candidates' clinical instructors also completed the EATACI Clinical Instructor Educator assessment form to assess their perceptions of their individual clinical instructional methods as well as clinical instruction in the program as a whole.

Alumni of the athletic training preparation program were asked to complete a survey on their readiness to enter the athletic training profession following graduation.

The survey focused on the 63 students that attended the program during the years of 2004-2011.

All participates involved with the study were asked to sign a letter of consent (see Appendix B).

Instruments

The Evaluation of Athletic Training Approved Clinical Instructors Assessment (EATACI) student/peer form was developed to help athletic training students and clinical instructor colleagues evaluate the clinical instruction of an ACI (see Appendix C). Along with the student/peer assessment form, a clinical instructor form was developed for program directors and clinical instructor educators to select, train, and evaluate ACIs involved in any athletic training preparation program. In this study, the clinical instructor survey served as a self-assessment distributed to the current ACIs (see Appendix D).

The EATACI consists of seven standards and associated criteria developed through a research project to enhance the understanding of the requirements of clinical education. It was developed due to the need of standards and related criteria for the selection, training, and evaluation of athletic training ACIs.

In this research, an earlier developed set of seven physical therapy clinical instructor standards/criteria and two additional standards/criteria developed through a review of the literature were systematically modified, judged, and revised through a Delphi technique. Athletic training education experts currently employed as program directors for entry-level CAATE accredited athletic training educational programs have the following: a doctoral degree, at least 5 years of supervising athletic training students, and familiarity/experience with clinical instruction in various athletic training clinical education settings. Athletic trainers critiqued and rated the clinical standards to make

chronological revisions in a series of three Delphi rounds. Standards were rated as to whether they were clear, necessary, and appropriate. Criteria were rated for the associated standard as to whether they were practical, supportive, comprehensible, specific, and consistent.

As a result, the EATACI was developed. It is a final set of seven standards and 50 associated criteria to measure the rated standards. The accepted standards include the following: legal and ethical behavior, communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge.

The EATACI was given to 35 athletic training candidates and six clinical instructors currently involved in the ATEP. The EATACI was also given to the program director and clinical educator. The students were asked to rank on a Likert-type scale their clinical instructor based on the recent ACI standards. The athletic training candidates performed an evaluation on the overall clinical instructor experience they had after being officially accepted into the ATEP. The athletic training candidate went through a clinical rotation to enhance their exposure to different settings, sports, and clinical instructors. By determining the student's perception of the overall clinical instructor experience, the researcher's opportunity to see trends, weakness, and strengths in clinical instruction increased.

The six clinical instructors also completed the EATACI self-assessment tool. The clinical instructor ranked their instructional method on a Likert-type scale based on the ACI standards developed by Ball State University and funded by the NATA research and education foundation. The clinical instructors were also asked to describe their different delivery strategies as they relate to the different standards.

Alumni Survey

A researcher-based survey was administered to alumni (N= 63) that were

involved in the athletic training preparation program from 2004-2011 (see Appendix E).

The survey was used due to its cost effectiveness and its capability to result in an

uncomplicated analysis. Using a survey allowed for the collection of data from pertinent

subgroups and was used in the study to analyze the perceptions of the program

participants (Fitzpatrick et al., 2004). The survey was intended for athletic training

preparation program alumni and was designed to produce qualitative data. By completing

this survey, participants had an opportunity to reflect on the program's effectiveness to

address their readiness to enter into an entry-level position following graduation and

identify the strengths and weakness of the preparation program. Items were constructed

to indicate personal demographics, educational experiences, opinions, and perceptions of

the 2004-2011 alumni participants.

The Athletic Training Preparation Program Alumni Survey was designed to

evaluate a Division II university's preparation program for aspiring athletic trainers.

Assessing the effectiveness of a program in order to enhance its improvement and/or

redesign the program was the objective.

The first set of questions in the survey pertained to the alumni's years in the

profession, current professional setting, educational degree completion, perception on

clinical education, and opinions of the program's strengths and weaknesses. Examining

the perspectives of the preparation program alumni, as well as personal experiences, gave

the researcher unique qualitative data which appear in narrative form.

Four of the questions in the alumni survey presented answers in a choice or a

structured item format. Each of the choices was coded numerically for easier recording

and processing. One of the questions appeared in open-response, or unstructured item format allowing the alumni to share thoughts freely. The second set of questions asked alumni to respond using a Likert-type scale about practical knowledge gained through the athletic training preparation program based on perceptions and individual experiences in clinical education. The surveys were distributed via email to all the alumni using the university's alumni database.

Survey Validation

The Athletic Training Preparation Program Alumni Survey was validated by randomly selecting 10 of the 63 surveys submitted from alumni. These alumni may or may not have been athletic trainers that were currently active in the athletic training profession. The survey was designed to take approximately 10 to 15 minutes for completion. Validating the field test enabled the researcher to successfully administer the Athletic Training Preparation Program Alumni Survey to students and instructors that were involved in the athletic training education program in 2004-2011.

The researcher determined the reliability of the survey by using Cronbach's alpha. Validation of the survey served as a predictor component measuring reliability. Cronbach's alpha proved that a collection of items would bring forth comparable responses over duplicated survey administrations.

Research Design

Formative program evaluation roles were incorporated which enabled the program's designers to make adjustments, if desired, based on the data that were collected from the research. The program evaluation method used in this study was the logic model.

Logic modeling is a thought process program evaluators have found to be useful

for at least 40 years and has become increasingly popular with program managers during the last decade. A logic model presents a plausible and sensible model of how the program will work under certain environmental conditions to solve identified problems. The logic model can be the basis for a convincing story of the program's expected performance, informing stakeholders of the problem the program focuses on and how it is uniquely qualified to address it. The elements of the logic model are resources, activities, outputs, and short-, intermediate-, and long-term outcomes.

Mixed Methods

The strategy chosen for this mixed methods approach was sequential explanatory. According to Creswell (2003):

> The sequential explanatory strategy characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. The priority typically is given to the quantitative data, and the two methods are integrated during the interpretation phase of study. (p. 215)

In this study, the quantitative portion (EATACI) was the most important instrument. The researcher's goal was to determine the athletic training candidates' and clinical instructors' perceptions of clinical education as they relate to their program. Quantitative data collected also explored to what extent the clinical instruction in the program was in alignment with the national athletic training supported standards. The qualitative findings were used to explain the alumni's perceptions of clinical education and student readiness when entering entry-level positions. Qualitative data also added depth to the findings of quantitative data (Creswell, 2003).

Quantitative Methods

Quantitative data were collected through the use of a Likert-type evaluation form

with responses on a numerical scale of 1-5. This information was used to determine if there was a difference in perception among candidates and clinical instructors towards clinical instruction in the athletic training program. The quantitative phase further explored how clinical instruction in the athletic training education program compared to the clinical instructional standards supported by the NATA. Qualitative data were collected through open-ended questions on the alumni survey. The participants, in their own words, expressed their readiness level upon graduating from the athletic training education program. They also gave the researcher insight into what they perceived to be the strengths and weakness of the program.

The Likert scale evaluation form is a type of instrument widely utilized to identify peoples' attitudes and opinions (Creswell, 2003). A Likert scale consists of a number of statement items, or propositions, usually equal in value loading, to which the participant responds according to the degree of intensity of agreement or frequency. Although it is most common to offer respondents five response options, some surveys offer as many as seven (Creswell, 2003). For the purpose of this study, the response offering for all survey propositions were never, seldom, occasionally, usually, and always.

Qualitative Methods

Qualitative data were collected through open-ended questions on the alumni survey. The participants, in their own words, expressed their readiness level upon graduating from the athletic training education program. They also gave the researcher insight into what they perceived to be the strengths and weakness of the program.

Historically, surveys have been the most commonly used data collection technique in the fields of education and social science. Surveys are used to arrive at a numeric account of trends, attitudes, or opinions of the population being studied. They

are used to answer questions, assess needs, set goals, compare trends over time, and to identify what, where, and in what quantity a phenomenon exits (Creswell, 2003). The strengths of the survey method include the ability to collect data from a specifically recognized target population with relative ease and speed, and the quantifiable nature of a systematic, consistent, object instrument (Creswell, 2003).

Rationale for Mixed Methods

According to Doyle, Brady, and Byrne (2009), the mixed methods approach is superior to a single approach because a) it can answer research questions that the other methodologies cannot answer; b) it provides stronger inferences; and c) it provides the opportunity for presenting a greater diversity of divergent views.

The use of a sequential explanatory strategy has a greater advantage than the other strategies because it is the straightest forward of the mixed method approaches (Creswell, 2003). This specific strategy was also chosen because, according to Creswell (2003), qualitative results are used in the explanation and interpretation of the primary quantitative study and also can be used when there are unexpected outcomes. The researcher can elaborate on or expand the findings of one method with another method (Creswell, 2003). The study sought to determine the different precipitations as they relate to the quality of clinical instruction and the readiness level of candidates entering the athletic training profession.

Data Analysis

Quantifiable survey data were analyzed using the SPSS statistical program. Descriptive statistics for each proposition and subcategory were calculated, including frequency, mean, median, and standard deviation. Qualitative data were analyzed by the researcher examining the alumni survey. The researcher focused on narrative comments

throughout the survey to recognize themes and frequencies. The researcher looked for themes that were recurring, and categorized the comments according to these themes, in addition to the subsection in which they were written. The researcher also triangulated data from alumni, current students, and approved clinical instructors to determine the overall precipitation of the clinical education at the Division II university.

Limitations

Possible limitations for this study included:

1. The study was conducted at a small Division II university; therefore, the number of participants was small.

2. There was a likelihood of strong relationships between candidates and clinical instructors involved in the program. As Straughter (2001) stated, "critiquing colleagues may be especially difficult when a closeness or feeling or knowing each other exists" (p. 33).

Delimitations

The delimitations for this study were:

1. The study was limited to only one athletic training education program.

2. Only the current students were providing data on clinical instruction based on the NATA supported clinical standards.

3. The findings of this study were solely used in the program evaluation to determine the status of clinical education.

Summary

Described in this chapter, this study was conducted using surveys to explore the readiness level of postgraduate athletic training students exiting an ATEP at a small Division II university. The Evaluation of Athletic Training Approved Clinical Instructors

instrument was created by Ball State University and validated through research involving

athletic training educators. The data were analyzed probing for possible trends associated

with the identified standards and the criteria that were associated.

Chapter 4: Data

The present study was designed to evaluate the perceptions of the current upper-level athletic training students, clinical instructors, and alumni regarding athletic training clinical education. Research involved the use of 1) The Evaluation of Athletic Training Approved Clinical Instructors (EATACI) student/peer assessment form to obtain their perceptions of their clinical instruction; 2) the EATACI clinical instructor educator assessment form to assess their perceptions of their individual clinical instructional methods. EATACI items are grouped into seven standards accompanied by associated criteria. The standards/criteria were developed in a National Athletic Trainers' Association-Research and Education Foundation research project and are considered to be clear, necessary, and appropriate as guidelines, not minimal requirements; and 3) the alumni survey was completed to reflect their readiness to enter the professional field. Questions on the survey were developed and then reviewed by athletic training professionals in the Charlotte area to determine validity. The subgroup answering the questions all had similar responses establishing the reliability of the instrument.

Standard One

Standard One of the EATACI focuses on the ethical and legal behavior of the instructors.

Table 1

Student, Alumni, and Instructor Responses for Criterion One – Services are appropriate
and within the scope of practice for the respected state

		Student	Alumni	Instructor
	Always	7 (46.67%)	5 (50%)	5 (71.43%)
	Usually	1 (6.67%)	4 (40%)	2 (28.57%)
	Occasionally	1 (6.67%)		
	Never	6 (40%)	1 (10%)	
Mean Response		3.20	4.20	4.71

The data related to criterion one shows that 24 of 32 total responses (75%) were

positive responses, indicating that all services in the clinical setting fall within the scope

of practice. Table 2 presents the data for clinical services that are consistent with state

and federal legislation (HIPAA, ADA, & FERPA).

Table 2

Student, Alumni, and Instructor Responses for Criterion One – Services are appropriate
and in line with state and federal legislation

		Student	Alumni	Instructor
	Always	12 (80%)	7 (70%)	7 (100%)
	Usually	3 (20%)	3 (30%)	
	Occasionally			
	Never			
Mean Response		4.80	4.70	5

The data related to criterion one shows that 32 of 32 total responses (100%) were positive responses, indicating that all services in the clinical services are consistent with state and federal legislation. Table 3 presents the data for clinical services and the instructors demonstrate ethical behavior.

Table 3

Student, Alumni, and Instructor Responses for Criterion Three – Services are appropriate and clinical services and the instructors demonstrate ethical behavior

		Student	Alumni	Instructor
	Always	13 (87%)	6 (60%)	7 (100%)
	Usually	2 (13.33%)	3 (30%)	
	Occasionally			
	Seldom		1 (10%)	
Mean Response		4.87	4.40	4.71

The data related to criterion one shows that 31 of 32 total responses (96.87%) were positive responses, indicating that all clinical instructors in the clinical setting demonstrate ethical behavior.

Standard Two

Standard Two of the EATACI focuses on the quality of communication that takes place between the student athletic trainer and approved clinical instructor. It is comprised of seven criteria that describe the different attributes associated with effective communication. Communication is one of the essential components of a clinical education program (Swann, 2002). Current students, alumni, and instructors associated with the university were asked to respond to the seven criteria and indicate how often the

best practices were observed in their clinical experience. Tables 4-10 present the data for

Standard Two, Effective Communication.

Table 4

Student, Alumni, and Instructor Responses for Criterion One – Communication between program director and clinical instructor criterion

		Student	Alumni	Instructor
	Always	8 (53.33%)	2 (20%)	7 (100%)
	Usually	3 (20%)	6 (60%)	
	Occasionally	2 (13.33%)	1 (10%)	
	Seldom	2 (13.33%)	1 (10%)	
Mean Response		4.07	3.90	5

The data related to criterion one show that 26 of 32 total responses (81.25%) were

positive responses, indicating that participants agree that there is adequate

communication between the program director and clinical instructors. Table 5 presents

the data for appropriate forms of communication between the clinical instructor and the

student.

Table 5

Student, Alumni, and Instructor Responses for Criterion Two – Appropriate forms of communication

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	1 (10%)	7 (100%)
	Usually	7 (46.60%	7 (70%)	
	Occasionally	2 (13.33)	2 (20%)	
Mean Response		4.27	3.90	5

The data related to criterion two show that 28 of 32 total responses (87.50%) were positive responses, indicating that appropriate forms of communication were common. Table 6 presents the data for appropriate forms of feedback from the clinical instructor to the student.

Table 6

Student, Alumni, and Instructor Responses for Criterion Three – Appropriate feedback.

Criterion		Student	Alumni	Instructor
	Always	5 (33.33%)	3 (30%)	3 (42.86%)
	Usually	9 (60%)	6 (60%)	2 (28.57%)
	Occasionally	1 (6.67%)	1 (10%)	2 (28.57%)
Mean Response		4.27	4.20	4.14

The data related to criterion three show that 28 of 32 total responses (87.50%) were positive, indicating appropriate forms of communication from the clinical instructors to the students. Table 7 presents the data for appropriate forms of

communication using open-ended questioning and direct problem solving.

Table 7

Student, Alumni, and Instructor Responses for Criterion Four – Communication by open-ended and direct problem solving

Criterion		Student	Alumni	Instructor
	Always	7 (46.67%)	2 (20%)	3 (42.86%)
	Usually	5 (33.33%)	7 (70%)	4 (57.14%)
	Occasionally	2 (13.33%)		
	Seldom	1 (6.67%)	1 (10%)	
Mean Response		4.20	4.00	4.43

The data related to criterion four show that 28 of 32 total responses (87.50%) were positive, indicating that open-ended and problem-solving communication was in place. Table 8 presents the data for appropriate forms of communication through ongoing professional dialogue between the clinical instructor and the student.

Table 8

Student, Alumni, and Instructor Responses for Criterion Five – Ongoing professional dialogue

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	1 (10%)	2 (28.57%)
	Usually	5 (33.33%)	7 (70%)	4 (57.14%)
	Occasionally	7 (46.67%)	2 (20%)	1 (14.29%)
Mean Response		3.73	3.90	4.14

The data related to criterion five show that 22 of 32 total responses (68.75%) were positive, indicating that only about two-thirds of the respondents felt that there was ongoing professional dialogue between clinical instructors and students. Seven of 15 students reported that ongoing dialogue occurred occasionally. Table 9 presents the data for appropriate forms of positive communication between the clinical instructor and the student.

Table 9

Student, Alumni, and Instructor Responses for Criterion Six – Positive communication

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	2 (20%)	2 (28.57%)
	Usually	11 (73.33%)	7 (70%)	4 (57.14%)
	Occasionally		1 (10%)	1 (14.29%)
	Seldom	1 (6.67%)		
Mean Response		4.07	4.10	4.14

The data related to criterion six show that 29 of 32 total responses (90.63%) were positive, indicating that for the most part communication between the clinical instructors and students was positive. Table 10 presents the data for appropriate forms of open communication and feedback between the clinical instructor, program director, and the student.

Table 10

Student, Alumni, and Instructor Responses for Criterion Six – Feedback from program director

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	1 (10%)	
	Usually	11 (73.33%)	5 (50%)	6 (85.71%)
	Occasionally	1 (6.67%)	4 (40%)	
	Seldom			1 (14.29%)
Mean Response		4.13	3.70	3.17

The data related to criterion seven indicate that 26 of 32 total responses (81.25%) were positive, indicating there is communication and feedback between instructors, students, and the program director.

Qualitative Response for Standard Two. The results of the compilation of qualitative data related to Standard Two show that several themes emerged. Communication in the clinical setting was insured by the clinical instructor through modeling or demonstration. Good communication skills by clinical instructors were demonstrated through the use of meetings with coaches, technology, and the use of paper injury reports. The data show that students are encouraged to talk to the coaches regarding athletic injuries while being monitored by instructors. This process is designed to increase their communication skills in different situations and to allow the student to gain confidence.

Summary of Standard Two Data. The survey data overwhelmingly indicate that students, alumni, and instructors perceive that there is effective communication between

the student and the clinical instructor. The interview data from the alumni group supports the survey data.

Standard Three

Standard Three of the EATACI survey concentrates on the interpersonal and professional relationships that are seen in the clinical educational setting. Standard Three is comprised of six criteria that evaluate the type of relationships that ACIs and athletic training students encounter in the clinical setting. Current students, alumni, and instructors associated with the university were asked to respond to the six criteria and indicate how often the best practices were observed in their clinical experience. Tables 11-16 present the data for Standard Three, Appropriate Interpersonal Relationships.

Table 11

Student, Alumni, and Instructor Responses for Criterion One – Appropriate relationships with students

Criterion		Student	Alumni	Instructor
	Always	13 (83.67%)	3 (30%)	3 (42.86%)
	Usually	2 (13.33%)	6 (60%)	4 (57.14 %)
	Seldom		1(10%)	
Mean Response		4.87	4.0	4.43

The data related to criterion one show that 32 of 32 total responses (100%) were positive responses, indicating that appropriate relationships between students and clinical instructors exist. Table 12 presents the data for appropriate and professional interpersonal relationships when interacting with students, colleagues, patients, and administrators.

Table 12

Student, Alumni, and Instructor Responses for Criterion Two – Models appropriate relationships with members of program

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	3 (30%)	2 (28.57%)
	Usually	6 (40%)	6 (60%)	3 (42.86%)
	Occasionally		1 (10%)	2 (28.57)
Mean Response		4.60	4.0	3.57

The data related to criterion two show that 29 of 32 total responses (90.63%) were positive, indicating clinical instructors demonstrated appropriate and professional interpersonal relationships with students, colleagues, patients, and administrators. Table 13 presents the data for appropriate forms of advocating for the student when interacting with colleagues, patients, and administrators.

Table 13

Student, Alumni, and Instructor Responses for Criterion Three – Advocate for the athletic training student

Criterion		Student	Alumni	Instructor
	Always	7 (46.67%)	3 (30%)	4 (57.14%)
	Usually	8 (53.33%)	6 (60%)	3 (42.86%)
	Occasionally		1 (10%)	
Mean Response		4.47	4.0	4.57

The data related to criterion three show that 31 of 32 total responses (96.88%)

were positive, indicating that the clinical instructor advocates for the students when interacting with colleagues, patients, and administrators. Table 14 presents the data for instructors serving as a positive role model and mentor for students.

Table 14

Student, Alumni, and Instructor Responses for Criterion Four – Positive role model

Criterion		Student	Alumni	Instructor
	Always	8 (53.33%)	4 (40%)	4 (57.14%)
	Usually	7 (46.67%)	6 (60%)	3 (42.86%)
Mean Response		4.53	4.0	4.57

The data related to criterion four indicate that 32 of 32 total responses (100%) were positive, showing that clinical instructors are positive role models. Table 15 presents the data related to the ACI's respect for gender, race, ethnic, and individual difference when interacting with people.

Table 15

Student, Alumni, and Instructor Responses for Criterion Five – Demonstrates respect for different background

Criterion		Student	Alumni	Instructor
	Always	12 (80%)	4 (40%)	1 (28.57%)
	Usually	3 (20%)	6 (60%)	3 (42.86%)
Mean Response		4.80	4.0	4.29

The data related to criterion six indicate that 32 of 32 total responses (100%) were positive, showing that clinical instructors show respect to their students regardless of

gender, race, ethnicity, or individual difference. Table 16 presents the data for appropriate and approachable demeanor toward the student in the clinical setting.

Table 16

Student, Alumni, and Instructor Responses for Criterion Six – Open and approachable demeanor

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	4 (40%)	3 (42.86%)
	Usually	6 (40%)	5 (50%)	4 (57.14%)
	Occasionally		1 (10%)	
Mean Response		4.6	4.0	4.43

The data related to criterion six indicate that 31 of 32 total responses (96.88%) were positive, showing that clinical instructors demonstrate appropriate demeanor and demonstrate that they are approachable.

Qualitative Response for Standard Three. The qualitative data from interviews show that the clinical instructors ensure the students understand the importance of interpersonal relationships through stated expectations and modeling. The instructors indicated by their responses that the importance of trust and professional relationships with athletes and coaches in order to be successful were discussed with the students. There should be mutual respect among all stakeholders as it pertains to student-athlete health.

Data Summary for Standard Three. The survey data show an overwhelmingly high percentage of positive responses to the criteria of Standard Three. The qualitative data validate the responses on the survey.

Standard Four

Standard Four of the EATACI focuses on the quality of effective instructional

skills that take place in the athletic training program's clinical environment. Clinical

instructors have the power to stimulate learning in the cognitive, affective, and

psychomotor domains (Gordon et al., 2000; Lauber et al., 2003; Tanner, 1998), while

developing critical thinking, decision making, and problem-solving skills (Laurent &

Weidner, 2001; Morgan & Knox, 1987; Round, 1999; Tanner, 1998). Standard Four is

comprised of 12 criteria that describe the different attributes associated with the

appropriate instructional delivery from instructors within the program. Current students,

alumni, and instructors associated with the university were asked to respond to each of

the 12 criterions and indicate how often the *best practices* were observed in their clinical

experience. Tables 17-28 present the data for Standard Four, Effective Instruction Skills.

Table 17

Student, Alumni, and Instructor Responses for Criterion One – Collaborates with
program director in planning learning experience in the clinical setting

Criterion		Student	Alumni	Instructor
	Always			5 (71.28%)
	Usually	6 (40%)	5 (50%)	2 (28.57%)
	Occasionally	5 (33.33%)	3 (30%)	
	Seldom	1 (6.67%)	2 (20%)	
	Never	3 (20%)		
Mean Response		2.93	3.30	4.71

The data related to criterion one show that only 18 of 32 total responses (56.25%)

were positive. Closer examination of the group responses show that 7 of 7 instructors

responded positively while only 10 of 25 students and alumni (40%) responded

positively. Table 18 presents the data for effective instructional skills via implementation

and evaluation of planned learning in the clinical setting.

Table 18

Student, Alumni, and Instructor Responses for Criterion Two – Facilitates and evaluates planned learning

Criterion		Student	Alumni	Instructor
	Always	1 (6.67%)	2 (20%)	4 (57.14%)
	Usually	7 (46.66%)	3 (30%)	3 (42.86%)
	Occasionally	6 (40%)	3 (30%)	
	Seldom	1 (6.67%)	2 (20%)	
Mean Response		3.53	3.50	4.57

The data related to criterion two show that overall 20 of 32 total responses

(62.50%) were positive. When one examines the group responses, 7 of 7 instructors gave

positive responses while only 13 of 25 participants in the student and alumni groups

responded positively. Table 19 presents the data related to effective instruction and

understanding the student's academic curriculum and skill level.

Table 19

Student, Alumni, and Instructor Responses for Criterion Three – Understands the student's academic curriculum and skill level

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	2 (20%)	
	Usually	5 (33.33%)	3 (30%)	1 (14.29%)
	Occasionally	3 (20%)	4 (40%)	2 (28.57)
	Seldom	1 (6.67%)	1 (10 %)	4 (57.14%)
Mean Response		4.07	3.60	2.14

The data related to criterion three show that 17 of 32 total responses (53.13%) were positive. The data further show that only 1 of 7 instructors feel that they recognize the students' skill levels. Students and alumni have a more positive perception with 16 of 25 (64%) answering in the affirmative. Table 20 presents the data regarding effective instruction and the utilization of teachable moments in the clinical setting.

Table 20

Student, Alumni, and Instructor Responses for Criterion Four – Takes advantage of teachable moments by instructing skills or content that is meaningful and immediately applicable

Criterion		Student	Alumni	Instructor
	Always	7 (46.67%)	2 (20%)	
	Usually	6 (40%)	6 (60%)	1 (14.29%)
	Occasionally	2 (13.33%)	2 (20%)	2 (28.57%)
	Seldom			3 (42.86%)
	Never			1 (14.28%)
Mean Response		4.33	4.0	2.43

The data related to criterion four indicate that 22 of 32 total responses (68.75%) were positive responses. Disaggregating the data into three groups shows diverging sets of data. Instructors (6 of 7) responded negatively to the criterion while students and alumni (21 of 25) answered positively. Table 21 presents the data for effective instruction in the clinical setting and employing different teaching styles to meet individual needs.

Table 21

Student, Alumni, and Instructor Responses for Criterion Five – Employs a variety of teaching styles

Criterion		Student	Alumni	Instructor
	Always	1 (6.67%)		
	Usually	10 (66.67%)	5 (50%)	3 (42.86%)
	Occasionally	2 (13.33%)	3 (30%)	4 (57.14%)
	Seldom	2 (13.33%)	2 (20%)	
Mean Response		3.67	3.30	3.43

The data related to criterion five indicate that 19 of 32 total responses (59.38%) were positive responses. The group data show that 11 of 15 students responded positively, five of 10 alumni responded positively, and three of seven instructors responded positively. Table 22 presents the data for effective instruction and guiding the student to advancement toward clinical program goals.

Table 22

Student, Alumni, and Instructor Responses for Criterion Six – Enables students to reach goals and objectives of the athletic training program

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	1 (10%)	1 (14.71%)
	Usually	7 (46.67%)	7 (70%)	6 (85.71%)
	Occasionally	2 (13.33%)	2 (20%)	
Mean Response		4.27	3.90	4.14

The data related to criterion six show that 28 of 32 total responses (87.50%) were positive responses, indicating that clinical instructors direct their students toward the program goals. Table 23 presents the data for effective instruction and the modification of learning experience based on the student's strengths and weaknesses.

Table 23

Student, Alumni, and Instructor Responses for Criterion Seven – Modifies learning experiences based on ATS's strengths and weaknesses

Criterion		Student	Alumni	Instructor
	Always	1 (6.67%)		1 (14.29%)
	Usually	11 (73.33%)	4 (40%)	3 (42.86%)
	Occasionally	1 (6.67%)	4 (40%)	3 (42.86%)
	Seldom	2 (13.33%)	2 (20%)	
Mean Response		3.73	3.20	3.71

The data related to criterion seven show that 20 of 32 total responses (62.50%) were positive responses. These data support the clinical instructors' efforts to address the strengths and weaknesses of the student. Table 24 presents the data supporting effective instruction and creating opportunities on problem solving and critical thinking.

Table 24

Student, Alumni, and Instructor Responses for Criterion Eight – Creates learning opportunities that promote problem solving and critical thinking

Criterion		Student	Alumni	Instructor
	Always	4 (26.67%)	1 (10%)	2 (28.57%)
	Usually	9 (60%)	4 (40%)	4 (57.14%)
	Occasionally	2 (13.33%)	4 (40%)	1 (14.29%)
	Seldom		1 (10%)	
Mean Response		4.13	3.50	4.14

The data related to criterion eight show that 24 of 32 total responses (75 %) were positive responses, indicating that the students and alumni recognize the clinical instructors' efforts to provide problem-solving activities involving critical thinking skills. Table 25 presents the data regarding effective instruction and the instructors' self-appraisal process.

Table 25

Student, Alumni, and Instructor Responses for Criterion Nine – Clinical educator self-appraises his/her teaching methods

Criterion		Student	Alumni	Instructor
	Usually	8 (53.33%)	3 (30%)	6 (85.71%)
	Occasionally	5 (33.33%)	5 (50%)	1 (14.29%)
	Seldom	1 (6.67%)	2 (20%)	
	Never	1 (6.67%)		
Mean Response		3.33	3.10	3.86

The data related to criterion nine show that 28 of 32 total responses (87.50%) were positive responses, indicating that the respondents perceive that clinical instructors do a self-appraisal of their instructional techniques. Table 26 presents the data regarding teacher enthusiasm toward instruction in the clinical setting.

Table 26

Student, Alumni, and Instructor Responses for Criterion Ten – Enthusiastic about teaching

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	2 (20%)	2 (28.57%)
	Usually	9 (60%)	5 (50%)	3 (42.86%)
	Occasionally	3 (20%)	1 (10%)	2 (28.57%)
	Seldom		2 (20%)	
Mean Response		4	3.70	4

The data related to criterion 10 show that 24 of 32 total responses (75%) were positive responses, indicating an enthusiasm for instruction in the clinical environment. Table 27 presents the response data on effective instruction and communication of terms based on the student's progression in the program.

Table 27

Student, Alumni, and Instructor Responses for Criterion Eleven – Communication based on the student's level of progression in the program

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	1 (10%)	
	Usually	11 (73.33%)	6 (60%)	1 (14.29%)
	Occasionally	1 (6.67%)	3 (30%)	2 (28.57%)
	Seldom			4(42.86%)
Mean Response		4.13	3.80	2.43

The data related to criterion 11 indicate that 22 of 32 total responses (68.75%) were positive responses. Disaggregating the data by group shows that only one of seven instructors responded positively, but 21 of 25 students and alumni responded positively. Table 28 presents the data for effective instruction and self-directed learning as a means to establish a lifelong practice of inquiry.

Table 28

Student, Alumni, and Instructor Responses for Criterion Twelve – Encourages self-directed learning as a means of lifelong practice of inquiry

Criterion		Student	Alumni	Instructor
	Always	3 (20%)	1 (10%)	
	Usually	11 (73.33%)	4 (40%)	5 (71.42%)
	Occasionally	1 (6.67%)	4 (40%)	1 (14.29%)
	Seldom		1 (10%)	1 (14.29%)
Mean Response		4.07	3.50	3.57

The data related to criterion 12 show that 24 of 32 total responses (75%) were positive, indicating the promotion of self-directed learning as a means of promoting a lifelong practice of inquiry. Table 29 presents the data for effective instruction and providing self-directed activities for the student.

Table 29

Student, Alumni, and Instructor Responses for Criterion Thirteen – Encourages self-directed learning activities

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	1 (10%)	1 (14.29%)
	Usually	5 (33.33%)	4 (40%)	2 (28.57%)
	Occasionally	1 (6.67%)	4 (40%)	3 (42.85%)
	Seldom	3 (20%)	1 (10%)	1 (14.29%)
Mean Response		4.07	3.50	3.43

The data related to criterion 13 indicate that 19 of 32 total responses (59.38%) were positive responses. The group data show that four of 11 students responded positively, five of five alumni responded positively, and three of seven instructors responded positively.

Qualitative Response for Standard Four. The instructors in the clinical setting ensure effective instruction through hands-on learning. The clinical instructors' responses indicate that demonstration of skills that the students learn in class coupled with guided practice time is the key to instructional effectiveness in the clinical setting. Open-ended questioning and spot questions are used to evaluate the student clinical knowledge. Involving the student in the treatment of athletes and presenting scenario-based questions

through the evaluation, treatment, and rehab process will encourage critical thinking and reinforce clinical knowledge.

Data Summary for Standard Four. The collective response data from the surveys indicate overall positive responses to the criteria. The interview data support the responses to the survey.

Standard Five

Standard Five of the EATACI focuses on the quality of supervision and administrative procedures that take place between the students, athletic trainer, and approved clinical instructor. It is comprised of 11 criteria that describe the different attributes associated with effective supervision. As student diversity increases, workplace demands change, societal expectation grows, and clinical supervision becomes intricate and focused on education (McCrea, 2003). Current students, alumni, and instructors associated with the university were asked to respond to the 11 criteria and indicate how often the best practices were observed in their clinical experience. Tables 30-39 present the data for Standard Five, effective supervision and administrational skills in the clinical setting.

Table 30

Student, Alumni, and Instructor Responses for Criterion One – Instructor directly supervises during formal acquisition, practice, and evaluation

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	5 (50%)	3 (42.86%)
	Usually	6 (40%)	5 (50%)	2 (28.57%)
	Occasionally			2 (28.57%)
Mean Response		4.6	4.5	4.14

The data related to criterion one shows that 30 of 32 total responses (93.75%) were positive responses, indicating that participants agree that the instructor directly supervises during formal acquisition, practice, and evaluation. Table 31 presents the data regarding the instructors intervening for the athlete if he/she is in risk of harm.

Table 31

Student, Alumni, and Instructor Responses for Criterion Two – Instructor intervenes on the behalf of the athlete

Criterion		Student	Alumni	Instructor
	Always	13 (86.67%)	7 (70%)	2 (28.57%)
	Usually	2 (13.33%)	3 (30%)	4 (57.14%)
	Occasionally			1 (14.29%)
Mean Response		4.87	4.7	4.14

The data related to criterion two show that 31 of 32 total responses (96.87%) were positive responses, indicating the instructor intervenes if a student is placing an athlete at

risk in the clinical setting. Table 32 presents the data for effective instruction and

providing self-directed activities for the student.

Table 32

Student, Alumni, and Instructor Responses for Criterion Three – Instructor encourages students to arrive at clinical destinations on their own and based on level of experience

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	3 (30%)	3 (42.86%)
	Usually	5 (33.33%)	5 (50%)	3 (42.86%)
	Occasionally	2 (13.33%)	1 (10%)	1 (14.29%)
	Seldom	2 (13.33%)	1 (10%)	
Mean Response		3.8	4.0	4.29

The data related to criterion four show that 25 of 32 total responses (78.13%)

were positive responses, indicating the instructor encouraged students to arrive at clinical

destinations on their own and based on level of experience. Table 33 presents the data

regarding the instructor presenting clear performance expectations to the student.

Table 33

Student, Alumni, and Instructor Responses for Criterion Four – Instructor implements policies and procedures of the program in the clinical setting

Criterion		Student	Alumni	Instructor
	Always	7 (46.67%)	5 (50%)	7 (100%)
	Usually	8 (53.33%)	4 (40%)	
	Occasionally		1 (10%)	
Mean Response		4.47	4.40	5

The data related to criterion four show that 31 of 32 total responses (96.87%) were positive responses, indicating the implementation of program policies by the instructor in the clinical setting. Table 34 presents the data on instructor presenting clear expectations.

Table 34

Student, Alumni, and Instructor Responses for Criterion Five – The instructor presents clear expectations

Criterion		Student	Alumni	Instructor
	Always	5 (33.33%)	8 (80.00%)	3 (42.86%)
	Usually	10 (66.67%)	2 (20.00 %)	3 (42.86%)
	Occasionally			1 (14.29%)
Mean Response		4.33	4.20	4.29

The data related to criterion five show that 24 of 32 total responses (75%) were positive responses, indicating that expectations are clearly stated in the clinical setting. Table 35 presents the data on instructors informing students of relevant procedures.

Table 35

Student, Alumni, and Instructor Responses for Criterion Six – Instructor informs the student of relevant procedures

Criterion		Student	Alumni	Instructor
	Always	10 (66.67%)	4 (40%)	4 (57.14%)
	Usually	4 (26.67%)	5 (50%)	3 (42.86%)
	Occasionally	1 (6.67%)	1 (10%)	
Mean Response		4.6	4.30	4.43

The data related to criterion six show that 30 of 32 total responses (93.75%) were positive responses, indicating that the students are aware of relevant procedures in the clinical setting. Table 36 presents the data for instructional feedback to the students from the clinical instructor.

Table 36

Student, Alumni, and Instructor Responses for Criterion Seven – Instructor provides feedback to the student

Criterion		Student	Alumni	Instructor
	Always	8 (53.33%)	2 (20%)	4 (57.14%)
	Usually	6 (40%)	5 (50%)	3 (42.86)
	Occasionally	1 (6.67%)	3 (30%)	
Mean Response		4.57	3.90	4.57

The data related to criterion seven show that 25 of 32 total responses (78.12%) were positive responses. Table 37 presents the data for effective instruction without using the student as medical coverage.

Table 37

Student, Alumni, and Instructor Responses for Criterion Eight – Instructors understand that the student is not medical coverage

Criterion		Student	Alumni	Instructor
	Always	11 (73.33%)	1 (10%)	3 (42.86%)
	Usually	2 (13.33%)	6 (60%)	4 (57.14%)
	Occasionally	2 (13.33%)	1 (10%)	
	Never		2 (20%)	
Mean Response		4.6	3.6	4.43

The data related to criterion eight show that 27 of 32 total responses (84.37%) were positive responses, indicating that students were not viewed by the clinical instructors as medical coverage. Table 38 presents the data regarding instructors completing requested evaluation forms in a timely manner.

Table 38

Student, Alumni, and Instructor Responses for Criterion Nine – Instructors complete evaluation forms in a timely manner

Criterion		Student	Alumni	Instructor
	Always	10 (66.67%)	5 (50%)	7 (100%)
	Usually	3 (20%)	4 (40%)	
	Occasionally	1 (6.67%)	1 (10%)	
Mean Response		4.4	4.40	5

The data related to criterion nine show that 29 of 32 total responses (90.62%)

were positive responses, indicating student evaluation forms are completed in a timely

manner by clinical instructors. Table 39 presents the data regarding instructor feedback

and providing accreditation material.

Table 39

*Student, Alumni, and Instructor Responses for Criterion Ten – The instructor provides
the program director with accreditation material in a timely manner*

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	4 (40%)	1 (28.57%)
	Usually	3 (20%)	5 (50%)	3 (42.86%)
	Occasionally	1 (6.67%)	1 (10%)	1 (28.57%)
	Never	5 (33.33%)		
Mean Response		3.33	3.80	4

The data related to criterion 10 show 22 of 32 total responses (68.75%) were

positive responses. Disaggregating the data by group shows that only nine out of 15

current students responded positively, but 15 of 17 alumni and instructors responded

positively. Table 40 presents the data regarding collaboration with the students to arrange

quality education.

Table 40

Student, Alumni, and Instructor Responses for Criterion Eleven – The instructor collaborates with the student to arrange quality education

Criterion		Student	Alumni	Instructor
	Always	7 (46.67%)	5 (50%)	6 (71.43%)
	Usually	7 (46.64%)	4 (40%)	1 (28.57)
	Occasionally	1 (6.67)	1 (10%)	
Mean Response		4.4	4.0	4.71

The data related to criterion 11 show 30 of 32 total responses (93.75%) were positive responses, indicating there is collaboration between students and instructors to ensure quality clinical education.

Qualitative Response for Standard Five. The clinical instructor reports that supervision and administration skills are ensured by a watchful eye. The students are said to learn the best by doing, so the instructor stated, "I try to let the student get involved when the athletes come to me with questions about their treatment." Communication is the most important part of supervision; one instructor stated, "I have an open-door policy as well as a graduate assistant" available to help with the supervision. The students need to be aware of the emergency action plan and the policy and procedures of every day operations at the clinical site.

Data Summary for Standard Five. The collective response data from the surveys indicate overall positive responses to the criteria. The interview data support the responses to the survey.

Standard Six

Standard Six of the EATACI focuses on the evaluation of the athletic training students' performances in the clinical setting. Standard Six is comprised of six criteria that describe the different evaluation polices. One of the most important aspects of teaching is determining if the students are learning what you planned to teach (Walsh et al., 2003). Current students, alumni, and instructors associated with the university were asked to respond to the six criteria and indicate how often the best practices were observed in their clinical experience. Tables 41-46 present the data for Standard Six, Evaluation of Student Performance.

Table 41

Student, Alumni, and Instructor Responses for Criterion One – Evaluates the student's performances and documents the student's knowledge, skills, and behaviors

Criterion		Student	Alumni	Instructor
	Always	8 (53.33%)	3 (30%)	6 (85.71)
	Usually	6 (40%)	7 (70%)	1 (14.29)
	Occasionally	1 (6.67%)		
Mean Response		4.47	4.30	4.86

The data related to criterion one show that 31 of 32 total responses (96.86 %) were positive responses, indicating instructors document the students' knowledge, skills, and behaviors in the clinical setting. Table 42 presents data regarding communication between the clinical instructors and the program director.

Table 42

Student, Alumni, and Instructor Responses for Criterion Two – Evaluation of the student's performances is communicated with the program director

Criterion		Student	Alumni	Instructor
	Always	5 (33.33%)	1 (10%)	5 (71.43%)
	Usually	5 (33.33%)	5 (50%)	2 (28.57%)
	Occasionally		3 (30%)	
	Seldom		1 (10%)	
	Never	5 (33.33%)		
Mean Response		3.33	3.60	4.71

The data related to criterion two show that 23 of 32 total responses (71.88%) were positive responses, indicating that student evaluations are communicated with the program director. Closer examination of the groups' responses show that seven of seven instructors responded positively while only 16 out of 25 (64%) of the students and alumni responded positively. Table 43 presents data regarding documentation of the students' progression based on performance criteria.

Table 43

Student, Alumni, and Instructor Responses for Criterion Three – Instructor documents student's progress based on performance criteria

Criterion		Student	Alumni	Instructor
	Always	8 (53.33%)	4 (40%)	2 (28.57%)
	Usually	7 (46.67%)	5 (50%)	5 (71.43%)
	Occasionally		1 (10%)	
Mean Response		4.53	4.30	4.29

The data related to criterion three show that 31 of 32 total responses (96.88%) were positive responses, indicating documentation of student's progress in the clinical program and communication with the program director. Table 44 presents the data regarding the instructor's view of the evaluation process as constructive and educational.

Table 44

Student, Alumni, and Instructor Responses for Criterion Four – Instructor views the evaluation process as constructive and educational

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	3 (30%)	2 (28.57%)
	Usually	6 (40%)	6 (60%)	
	Occasionally		1 (10%)	3 (42.86%)
	Seldom			2 (28.57%)
Mean Response		4.6	4.20	3.29

The data related to criterion four indicate that 26 of 32 total responses (81.25%)

were positive responses. When one examines the group responses, 24 of 25 participants

in the current students and alumni groups gave positive responses while only two of

seven instructors responded positively. Table 45 presents data regarding the student's

need for remediation being communicated to the program director.

Table 45

*Student, Alumni, and Instructor Responses for Criterion Five– Instructor communicates
with the program director in a timely manner when students need remediation*

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	3 (30%)	2 (28.57%)
	Usually	4 (26.67%)	4 (40%)	4 (57.14%)
	Occasionally		1 (10%)	1 (14.29%)
	Seldom	5 (33.33)	2 (20%)	
Mean Response		3.47	3.80	4.14

The data related to criterion five indicate that 23 of 32 total responses (71.88%)

were positive. Table 46 presents the data regarding the instructor's participation in

formative and summative evaluations.

Table 46

Student, Alumni, and Instructor Responses for Criterion Six– Instructor participates in formative and summative evaluations

Criterion		Student	Alumni	Instructor
	Always	6 (40%)	2 (20%)	3 (42.68%)
	Usually	8 (53.33%)	6 (60%)	4 (57.14%)
	Occasionally	1 (6.67%)	2 (20%)	
Mean Response		4.33	4.00	4.43

The data related to criterion five show that 29 of 32 total responses (90.63%) were positive responses, indicating that clinical instructors participate in formative and summative evaluations.

Data Summary for Standard Six. The collective response data from the surveys indicate overall positive responses to the criteria. The interview data support the responses to the survey.

Qualitative Response for Standard Six. The instructors indicated that the evaluation process of the students in the clinical setting includes direct feedback. The students are formally evaluated twice a semester, which is the duration of one clinical rotation. The clinical instructor evaluates through *observation* of skills, tendencies, habits, work habits, and professionalism. The instructors ensure that the students are provided with constructive criticism and guided to make the necessary changes in order to be successful.

Standard Seven

Standard Seven of the EATACI focuses on the student's demonstration of clinical

skills and knowledge. Standard seven is comprised of three criteria that describe the

different skills and knowledge that the clinical instructor should maintain through

continuing education. Current students, alumni, and instructors associated with the

university were asked to respond to the three criteria and indicate how often the best

practices were observed in their clinical experience. Tables 47-49 present the data for

Standard Seven, Clinical Skills and Knowledge.

Table 47

Student, Alumni, and Instructor Responses for Criterion One – Instructor is capable of
teaching and evaluating clinical proficiencies

Criterion		Student	Alumni	Instructor
	Always	13 (86.67%)	5 (50%)	1 (28.57%)
	Usually	1 (6.67%)	3 (30%)	3 (42.86%)
	Occasionally	1 (6.67%)	2 (20%)	2 (28.57%)
Mean Response		4.8	4.30	4

The data related to criterion one show that 26 of 32 total responses (81.25%) were

positive responses, indicating the instructor's capability of teaching and evaluating

clinical proficiencies. Table 48 presents the data regarding the instructor's participation

in formative and summative evaluations.

Table 48

Student, Alumni, and Instructor Responses for Criterion Two – Instructor skills are current and based on science and evidence

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	5 (50%)	3 (42.86%)
	Usually	5 (33.33%)	3 (30%)	3 (42.86%)
	Occasionally	1 (6.67%)	2 (20%)	1 (14.29%)
Mean Response		4.53	4.30	4.29

The data related to criterion two shows that 28 of 32 total responses (87.50%) were positive responses, indicating that instructors' skills were current and based on science and evidence. Table 49 presents the data regarding the instructor's skills and knowledge through continuing education.

Table 49

Student, Alumni, and Instructor Responses for Criterion Three – Instructors maintain skills and knowledge through continuing education

Criterion		Student	Alumni	Instructor
	Always	9 (60%)	6 (60%)	6 (85.71%)
	Usually	3 (20%)	4 (40%)	1 (14.29%)
	Occasionally	3 (20%)		
Mean Response		4.4	4.6	4.86

The data related to criterion three show that 29 of 32 total responses (90.63%) were positive responses, indicating that the current instructor maintains skills and

knowledge through continuing education.

        Data Summary for Standard Seven. The collective response data from the surveys indicate overall positive responses to the criteria. The interview data support the responses to the survey.

        Qualitative Response for Standard Seven. The clinical instructors indicate that they ensure mastery of clinical skills and knowledge pertaining to clinical education competencies and proficiencies. The instructors are provided with a step-by-step process that outlines the different clinical proficiencies. The clinical instructors use proficiency sheets that are provided by the athletic training education program to evaluate clinical proficiencies. Many responses indicate that the instructor demonstrates, explains, observes, and encourages practice of the skill the student is introduced to in the classroom setting. If further communication of the skill is needed then the instructor will further explain the clinical proficiencies the student is trying to master.

Alumni Survey

        An alumni survey was completed to reflect their readiness to enter the professional field. Questions on the survey were developed and then reviewed by athletic training professionals in the Charlotte area to determine validity. The subgroup answering the questions all had similar responses increasing the reliability of the instrument. The total number of responses equaled 17. Ten out of 16 alumni that responded currently are employed as licensed athletic trainers.

Table 50

Alumni Responses for Postgraduate Readiness Level – The clinical experience and the student's readiness level

	Strongly Agree	Agree	Disagree	Strongly Disagree
Clinical experience at your undergraduate program prepares you for entry-level employment.	6 (38%)	10 (63%)	1 (6%)	
Clinical experience pre-prepared to take the NATABOC.	4 (25%)	10 (63%)	2 (13%)	
Clinical experience exposed you to a variety of clinical settings.	5 (31%)	6 (38%)	5 (31%)	
Communication between your clinical education and athletic training classes.	4 (25%)	8 (50%)	2 (13%)	3 (19%)
ACI prepared you for entry-level position after graduation.	6 (38%)	11 (69%)		

The data related to the readiness level of students after graduation indicate that 61 of 74 total responses (82.43%) were positive responses.

Strengths and Weaknesses of the Program

The alumni were presented with a series of open-ended questions regarding the overall experience in the athletic training education program. When asked to describe the strengths of the clinical setting, a reoccurring theme in the data was "lots of hands-on experience." The instructors were described as motivated, energetic, and willing to go above and beyond to help the students. The clinical setting was described by alumni as "a fun atmosphere" providing a large variety of clinical settings and clinical instructors. Evaluation, bracing, and taping techniques were strengths of the undergraduate clinical experience that the alumni identified in the open questions.

The second question presented to the former athletic training students focused on what they felt would have enhanced their clinical education and better prepared them for entry-level positions as athletic trainers.

The recurring theme for this response was "experience." Many responses indicated that the clinical instructors "waited for injuries to occur." There were little simulations of possible injuries that could occur. One alumnus stated, "I felt as though I was not prepared; I was not prepared in any way to handle several of the injuries that we read about in the text books." The hands-on experiences were limited to what the student experiences in the particular clinical setting. The responses from all of the alumni were complimentary to the "family like atmosphere" and the hands-on learning situations as a whole in the clinical settings. However, they felt that their clinical experience could have benefited from better communication between the academic and clinical aspects of the program.

Clinical Settings

When asked to comment on the different settings that were in the clinical rotation, the alumni indicated that the college sport rotation had the most impact on their readiness level for postgraduation positions. In the different rotations on the college campus, former students indicated that "each rotation helped in a different way." During this rotation, students reported a good overview of common injuries, rehabs, and treatments. The volume of injuries seen with football and the ability of traveling with teams allowed for knowledge and decision-making skills. Two recurring themes were noticed when college sport rotation was mentioned. Several responses stated that this setting was their one experience and it somewhat prepared the student for an entry-level position in athletic training. First aid, rehab, and learning to multi task were traits that were gained

from the daily experience with the different athletic teams at the university.

The high school clinical rotation was noted in many responses as not being an option for the alumni when they were in the athletic training program. The reoccurring theme included the need for a rotation to experience the high school setting. One alumnus commented, "I wish I had the high school experience, because my first job post undergraduate studies was coverage for three high schools. It was definitely overwhelming." The students had the experience to observe in a physical therapy clinic, doctor's office, and emergency room. The majority of the responses reported that this rotation was not beneficial to the athletic training students. One student noted, "I was prepared to study my next field of education, but not very much prepared to be employed in the athletic training industry."

Summary

Quantifiable survey data were analyzed using the SPSS statistical program. Descriptive statistics for each proposition and subcategory were calculated, including mean and median. Qualitative data were analyzed by the researcher examining the alumni survey. Narrative comments in both the alumni and EATACI survey identified themes and frequencies in the clinical education setting. There were identifying positive and negative themes that were recurring in the data. The researcher also triangulated data from alumni, current students, and approved clinical instructors to determine the overall precipitation of the clinical education at the Division II university.

Chapter 5: Results

The purpose of this study was to determine to what extent the athletic training preparation program at a Division II university aligns with the Nation Athletic Trainer Association Research Education Foundation clinical standards. The study also explored the different perceptions of clinical education in this program from students, alumni, and instructors.

In order to answer the research questions of the study, an athletic training education program at a private university in rural North Carolina was evaluated. Qualitative and quantitative methods were utilized, enabling the study to take a mixed methods approach to determine the alignment of an undergraduate athletic training preparation program to the clinical standards that were developed through research at Ball State University and funded by the National Athletic Trainers' Association.

The study was designed to evaluate the perceptions of the current upper-level athletic training students, clinical instructors, and alumni regarding athletic training clinical education. Research involved the use of 1) The Evaluation of Athletic Training Approved Clinical Instructors (EATACI) student/peer assessment form to obtain their perceptions of their clinical instruction; 2) the EATACI clinical instructor educator assessment form to assess their perceptions of their individual clinical instructional methods. EATACI items are grouped into seven standards accompanied by associated criteria. The standards/criteria were developed in a National Athletic Trainers' Association-Research and Education Foundation research project and are considered to be clear, necessary, and appropriate as guidelines, not minimal requirements; and 3) the alumni survey was completed to reflect their readiness to enter the professional field. Questions on the survey were developed and then reviewed by athletic training

professionals in the Charlotte area to determine validity. The subgroup answering the questions all had similar responses, increasing the reliability of the instrument.

Research Question 1

How close do the program goals align with the seven standards/criteria that were funded by the National Athletic Trainer Association-Research and Education Foundation as measured by the ACI Evaluation instrument? Standard One is focused on the ability of the instructor to demonstrate ethical behavior and operate within the federal and state scope of practice. The data collected in the study represent the perception of current students, alumni, and current clinical instructors with respect to ethical behavior. The data related to Standard One indicated that 87 of 96 total responses (90.65%) were positive responses. The data related to the current student responses indicated 38 of 45 responses (84.44%) were positive. The alumni responses regarding communication showed that 28 of 30 responses (93.33%) were positive. The current instructors responded with 21 of 21 positive responses (100%) regarding ethical behavior in the clinical setting.

Standard Two of the EATACI focuses on the quality of communication that takes place between the student athletic trainer and approved clinical instructor. It is comprised of seven criteria that describe the different attributes associated with effective communication. Communication is one of the essential components of a clinical education program (Swann, 2002). Time after time, communication skills have been found to be a vital factor for clinical education (Laurent & Weidner, 2001). The data collected in the study represents the perception of current students, alumni, and current clinical instructors with respect to communication. The data related to Standard Two indicated that 188 of 224 total responses (83.92%) were positive responses. The data

related to the current student responses indicated 87 of 105 responses (82.85%) were positive. The alumni responses regarding communication show that 57 of 70 responses (81.42%) were positive. The current instructors responded with 44 of 49 positive responses (89.79%) regarding communication in the clinical setting.

Standard Two focused on the communication between the student and clinical instructor in the clinical environment. The comprehensive response from all groups surveyed indicated a positive perception of Standard Two. However, the following criteria were areas that indicated opposition between the current students, alumni, and current clinical instructors.

The data indicated that there were notable differences between subgroups regarding several criteria. Criterion five focused on the professional dialect that occurs between the instructor and student during the clinical experience. It showed that only 53.33% of the current students reported in a positive manner, whereas 80% of alumni and 85.71% of the current instructors reported that professional communication was always or usually taking place in the clinical setting. The last component of the communication standard focused on the feedback from the student, program director, and clinical educator to the ACI. The current students (93.33%) and instructors (85.71%) reported that the communication always or usually happened within the clinical education program. However, only 60% of the alumni group believed that the open communication between all parties always or usually happened. Four out of 10 alumni recorded that this type of communication took place occasionally.

Standard Three of the EATACI survey concentrates on the interpersonal and professional relationships that are seen in the clinical educational setting. Standard Three is comprised of six criteria that evaluate the type of relationship the ACIs and athletic

training students encounter in the clinical setting. The data collected in the study represent the perception of current students, alumni, and current clinical instructors in respect to interpersonal relationships. The data related to Standard Three indicated that 183 of 192 total responses (95.31%) were positive responses. The data related to the current student responses indicated 90 of 90 responses (100%) were positive. The alumni responses regarding interpersonal relationships showed that 56 of 60 responses (93.33%) were positive. The current instructors responded with 37 of 42 positive responses (88.09%) regarding communication in the clinical setting.

Standard Four of the EATACI survey is based on effective clinical instruction. Standard Four is comprised of 13 criteria that evaluate the type of instruction the ACIs are providing to the athletic training students in the clinical setting. The data collected in the study represent the perception of current students, alumni, and current clinical instructors with respect to effective instruction. The data related to Standard Four indicated that 294 of 353 total responses (83.56%) were positive responses. The data related to the current student responses indicated 165 of 195 responses (84.61%) were positive. The alumni responses regarding effective instruction show that 72 of 130 responses (55.38%) were positive. The current instructors responded with 56 of 91 positive responses (61.53%) regarding effective clinical instruction.

Standard Four focuses on the instructional delivery from the clinical instructor in the clinical environment. The complete response from all groups surveyed indicated a positive perception of Standard Four. However, the following criteria were areas that indicated opposition between the current students, alumni, and current clinical instructors.

The data indicated that there were notable differences between subgroups

regarding several criteria. Criterion one focuses on the collaboration of the ACI, program director, and clinical educator. Sixty percent of the current students and 50% of the alumni reported that collaboration occasionally, seldom, or never occurs among all of the involved parties in the athletic training education program. However, 100% of the current instructors indicated that collaboration always and usually takes place between the program director, clinical educator, and clinical instructor. There is a notable difference between the student population and instructor perception of collaboration.

Criterion two refers to the quality of learning experience that the student athletic trainers are exposed to in the clinical setting. The current students (53.33%) and program alumni (50%) indicate that planned learning always or usually occurred in the clinical setting. However, 100% of the instructors indicated that planned learning always and usually occurred in the clinical setting. It is prominent that the perception of the current instructors differs from the current students and alumni by a substantial amount.

Criterion three is based on the ACI's understanding of academic curriculum and determines individual goals for the student athletic trainer based on his/her experience in the educational program. Seventy three and thirty three percent of the current students feel that the ACIs always or usually meet the criterion. However, only 50% of the alumni and 14.29% of the current instructors indicate progression-leveled based instruction always or usually happened. Fifty percent of the alumni and 85.71% of the instructors indicate that the ACIs occasionally or seldom understand the academic curriculum, level of preparation, and current level of performance relative to the goals of the clinical education program.

Criterion four is based on the ACI's utilization of teachable moments within the clinical setting. Data indicated that 86.67% of the current students and 80% of the alumni

responded positively regarding Standard Four. However, the data also indicated that six of the seven clinical instructors' responses (85.71%) showed that teachable moments occasionally, seldom, and never happen.

Criterion five is based on the ACI's ability to implement different teaching strategies in the clinical education setting. Survey responses regarding teaching strategies indicated that 73.33% of the current students reported that clinical instructors always or usually met the different learning styles of the students. The surveys indicate that 50% of the alumni and 57.14% of the current instructors believed that numerous teaching styles occur only occasionally or seldom in the clinical setting.

Criterion seven focuses on the modification of learning experiences based on the strength and weakness of the student. Current students and the alumni group showed opposing data when surveyed. The data indicated 80% of the current students believe that modification always or usually takes place during clinical rotations; however, only 40% of the alumni group responded that adjustments took place in the clinical setting. The instructors' feedback did not indicate either a positive or negative opinion. The data showed that 57.15% of the current instructors believe that modification took place usually or always; whereas, 42.86% believe that the ACI occasionally or rarely made alterations required to meet the needs of students.

Criterion eight focused on student engagement and learning opportunities in the clinical setting. The data indicated that 86.67% of the current students in the program responded in a positive manner regarding student engagement and learning opportunities. The current instructors (85.71%) responded that the opportunity for critical thinking and problem solving in the clinical arena occurred usually or always. However, the alumni response was neither positive nor negative. Fifty percent of the alumni sample stated that

they were involved in a rigorous and engaging clinical environment. The other half of the alumni indicated an engaging environment occasionally or seldom takes place during the clinical experience.

Criterion nine focused on the ACI performing self-appraisal on his/her teaching methods used in the clinical setting. The survey reports that 86.66% of the current students, 80% of the alumni, and 100% of the instructors indicated that self-reflection took place usually and occasionally in the clinical education setting. The groups surveyed did not report a consistent self-evaluation process during the clinical experience with 0% reporting ACIs always conducting self-reviews.

Criterion 11 focused on the communication between the student and the clinical instructor. When asked if the instructor incorporates concepts in terms that the student can understand based on his/her progression in the program, 93% of the current students' responses indicated that level appropriate communication always or usually takes place. However, only 70% of the alumni felt that communication occurred frequently. The data indicated that 30% of the alumni responded that communication occasionally occurs in the clinical environment. The survey response showed 71.43% of current instructors report that suitable instructional dialect seldom or occasionally took place in the athletic training clinical education program.

Criterion 12 focused on self-directed learning is encouraged. Fifty percent of the alumni reported that self-directed learning occurs always or usually, and 50% reported that this type of instruction occasionally or seldom takes place in the clinical setting. The last criterion that is described in Standard Four, focused on appropriate self-directed learning activities for athletic training students. The survey indicates that 73.33% of the current students report that self-directed learning takes place always or usually; however,

50% of the alumni and 42.86% of the instructors believe that self-directed instruction happens only on occasion or seldom in the clinical environment at the university. Standard Four of the EATACI survey is based on effective clinical instruction.

Standard Five is comprised of 11 criteria that evaluate the administration and supervisory procedures in the clinical setting. The data collected in the study represent the perception of current students, alumni, and current clinical instructors with respect to supervision and administration. The data related to Standard Five indicated that 311 of 352 total responses (88.35%) were positive responses. The data related to the current student responses indicated 145 of 165 responses (87.87%) were positive. The alumni response regarding effective instruction showed that 97 of 110 responses (88.18%) were positive. The current instructors responded with 69 of 77 positive responses (89.61%) regarding supervision and administration.

Standard Five is focused on the supervision aspect of the clinical instructor in the clinical environment. The comprehensive response from all groups surveyed indicated a positive perception of supervision and administrative polices. However, the following criteria were areas that indicated opposition between the current students, alumni, and current clinical instructors.

The data showed that there were notable differences between subgroups regarding several criteria. Criterion one focused on the direct supervision during formal acquisition, practice, and evaluation of the clinical proficiencies. The overall response from current students (100%), alumni (100%), and current instructors (71.43%) stated that direct supervision always or usually occurred; therefore, it represented a positive response in criterion one. It should be noted that 28.57% of the current instructors felt that this quality of supervision only occasionally happened. Criterion seven focused on feedback;

93.33% of the current students, 70% of the alumni, and 100% of the current clinical instructors responded that feedback from the ACI was acquired from direct observation, discussion, and review of athletic documentation. Criterion eight discusses the students' educational experiences as learners in the clinical setting; 88.66% of the current students, 70% of the alumni, and 100% of the current instructors indicated that students were seen as learners, not means for medical coverage. Criteria ten is based on the ability of the clinical instructors to provide materials to the program director in a timely manner for the accreditation process; 90% of the alumni and 100% of the current clinical instructors responded by stating that accreditation material is always or usually handled in a timely manner by the clinical instructors and program director. However, only 60% of the students felt that a timely process for documents always or usually happened; 33.33% of the current students reported that it never happened.

Standard Six is comprised of six criteria that assess the evaluation process in the clinical setting. The data collected in the study represent the perception of current students, alumni, and current clinical instructors with respect to student evaluation. The data related to Standard Six indicated that 163 of 192 total responses (90.30%) were positive responses. The data related to the current student responses indicated 78 of 90 responses (86.66%) were positive. The alumni response regarding effective instruction showed that 49 of 60 responses (81.60%) were positive. The current instructors responded with 36 of 42 positive responses (85.71%) regarding the student evaluation process in clinical education.

Standard Six is focused on the appropriate student evaluation process in clinical education. The comprehensive response from all groups surveyed indicated a positive perception of Standard Six. However, the following criteria were areas that indicated

opposition between the current students, alumni, and current clinical instructors.

The data indicated that there were notable differences between subgroups regarding several criteria. Criterion two focuses on the communication between the instructor, program director, and clinical educator regarding the use of performance evaluation instruments. The responses from the current students, alumni, and current instructors differ. Seven out of seven of the clinical instructors responded that communication regarding evaluation instruments used in the clinical setting always (73.43%) or usually (28.57%) occurred. However, 60% of the alumni and 66.66% of the current students felt that the communication always or usually occurs. Thirty three and thirty three percent of the current students indicated that this never happened; whereas 60% of the alumni reported that communication occasionally or seldom happened between the clinical instructor, program director, and clinical educator regarding performance evaluation instruments. Criterion four is based on the evaluation process that takes place in the clinical setting. All the current students and 90% of the alumni that participated in the survey indicated that the evaluation process always or usually was constructive and educational. However, the current instructors' responses were negative. Seventy one and thirty three percent of the current instructors stated that a constructive and educational evaluation only occasionally or seldom occurred in the clinical setting. Criterion five focuses on the timeframe where communication occurs between the clinical instructor, program director, and clinical educator regarding remediation of an athletic training student; 66.67% of the current students, 70% of the alumni, and 85.71% of the current instructors believe that communication regarding student remediation in a timely manner always or usually occurs in the clinical program. However, the data reveals that 44.29% of the subjects surveyed reported that communication only

occasionally or seldom happens and 33.33% of the current students reported it never

occurring to their knowledge.

Standard Seven is comprised of three criteria that assess the skill and knowledge

the clinical instructor has regarding clinical proficiency. The data collected in the study

represents the perception of current students, alumni, and current clinical instructors with

respect to clinical skills of the instructor. The data related to Standard Seven indicated

that 83 of 96 total responses (86.45%) were positive responses. The data related to the

current student responses indicated 40 of 45 responses (88.88%) were positive. The

alumni responses regarding effective instruction showed that 26 of 30 responses

(87.50%) were positive. The current instructors responded with 17 of 21 positive

responses (85.07%) regarding the student evaluation process in clinical education.

Standard Seven is focused on the clinical instructor's skill and knowledge of

clinical proficiency. The comprehensive response from all groups surveyed indicated a

positive perception of Standard Seven.

Research Question 2

To what extent does the undergraduate athletic training preparation

program prepare candidates for entry-level employment as measured by alumni

surveys? The alumni survey was developed to determine to what extent the

undergraduate athletic training preparation program equips the alumni to begin a career in

an entry-level athletic training position. The survey was disrupted to alumni who

graduated from the athletic training program during the years of 2004-2011. Sixteen out

of 36 (44.44%) former students responded to the survey, indicating their perception of the

clinical experience in the undergraduate program.

The data showed that 10 out of 16 (62.50%) of the alumni indicated that they

were currently working as a licensed athletic trainer. The data showed that 61 of 74 total responses (82.43%) were positive, indicating that the overall clinical experience was relevant and prepared the student for postgraduation. The data showed that 14 out of 16 (87.50%) alumni responses were positive, signifying that the clinical experience prepared the student to take and pass the National Athletic Training Association Board of Certification exam. When exploring the student's availability to a variety of clinical exposure, data showed 11 of 16 (68.75%) alumni responded positivity. The data showed that 12 of 17 (70.58%) participants responded positively, signifying that communication took place between the clinical and academic facilitators in the undergraduate program. The data showed that 17 of 17 (100%) of the alumni responded positively, indicating the clinical instructor prepared the student for an entry-level position.

Research Question 3

What are the strengths and weaknesses of the clinical experience in the undergraduate athletic training preparation program as measured by both alumni surveys and the ACI evaluation instrument? The alumni were presented with a series of open-ended questions regarding the overall experience in the athletic training education program. When asked to describe the strengths of the clinical setting, a reoccurring theme in the data was "lots of hands-on experience." The instructors were described as motivated, energetic, and willing to go above and beyond to help the students. The clinical setting was described by alumni as "a fun atmosphere" providing a large variety of clinical settings and clinical instructors. The response from all the alumni was complimentary to the "family like atmosphere" and the hands-on learning situations as a whole in the clinical settings.

Weaknesses included the following: many responses indicated that the clinical

instructors "waited for injuries to occur." There were little simulations of possible

injuries that could occur. One alumnus stated, "I felt as though I was not prepared, I was

not prepared in any way to handle several of the injuries that we read about in the text

books." The hands-on experiences were limited to what the student experienced in the

particular clinical setting. The instructors indicated that student involvement and

motivation were concerns. Communication between the clinical instructor and program

director was noted as a weakness. Conflicts were reported due to the different teaching

styles of the classroom professors and the clinical instructors. Little interaction in the

education of approved clinical instructors was noted.

Conclusions

When comparing the data that was associated with each standard, the responses

from students, alumni, and instructors indicated that the athletic training education

program was effective and provided a positive atmosphere for learning. The EATACI,

alumni survey, and instructor comments indicated supervision, communication,

knowledge, ethical behavior, evaluation, and relationships were attributes that strengthen

the clinical program. The themes that appeared throughout the data revealed instructors

provided a fun and energetic learning environment for the students. Skills were taught

though demonstration, modeling, and hands-on application in the clinical setting.

The data also revealed that effective instruction and communication among the

clinical instructor and program director were areas of concern. The data indicated that

planned learning and recognition of teachable moments were attributes that should be

reviewed to increase the efficiency of the clinical experience for the students. Standard

Four focused on the types of instruction that were delivered by the clinical instructor

during clinical rotations. The common themes that occurred in the research indicated that

clinical instructors "waited for injuries to occur." Responses from the alumni recalled little simulations of possible injuries that could occur in the practical setting. Many students felt as though they were not as prepared as they should have been. The hands-on experiences were limited based on what clinical setting the student was placed in for his/her rotation. The alumni also felt that their clinical instruction would have benefited from better communication between the academic and clinical aspects of the program. The instructional attributes that were considered areas for improvement included collaboration with the program director (56.25%), planned learning (62.50%), student academic curriculum (53.13%), utilization of teachable moments (68.75%), and self-directed activities (59.38%).

Recommendations

The reoccurring theme through the research indicated a positive atmosphere among the clinical instructor and students. However, poor communication between the clinical program and the academic aspect were weak and shown to have a negative impact on effective instruction. It could be recommended that the clinical instructors and program director dedicate time for common core planning each week, develop syllabi that incorporate the clinical aspect into the grading system, and implement clinical standards presented in the classroom that would help both the student and the clinical instructor in the accountability process.

Effective instruction would also benefit from more continuing education for clinical instructors. The focus should be on pedagogy with a focal point on how to educate and implement different teaching strategies based on student level, skill, and clinical setting. The clinical instructor also would have an advantage with weekly meetings to specify what is being presented in class. The program director and clinical

instructor would plan how to implement the information presented in class and plan the

practical application clinical setting.

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Appendix A

Letter of Consent Program Director

Dear Program Director,

      The purpose of this correspondence is to ask your consent for those students, professors, and approved clinical instructors in the undergraduate athletic training education program (ATEP) at the university to be involved in a responsive program evaluation.

      It is my intent to complete my doctoral dissertation through Gardner-Webb University. The focus of my work will be on evaluating clinical education and its alignment with the National Athletic Training Clinical Standards using the systematic logic model. Data for this study will be obtained through the processes of a researcher-created participant survey, observation, and interviews with program leaders.

      Participation in this study is voluntary and data received will be presented to the constituents of the ATEP for future reference. All participants' responses will be kept confidential.

      Any questions or concerns regarding this research should be directed to Brandy Clemmer, the researcher, at (704)-408-7180. Inquiries regarding the nature of this research, the university's rights as a subject, or any aspect of this research as related to participates can be directed to the researcher or Gardner-Webb University. The Chairperson of this committee is Ron Nanney.

      If you agree for me to conduct a responsive evaluation regarding the alignment of clinical education standards, please sign below. Thank you in advance for assisting me with my professional endeavor.

Sincerely,

Brandy Clemmer
Doctoral Student, Gardner-Webb University.

_____   _____

Program Director   Date

Appendix B

Participant Consent letter

Consent Form

You are invited to take part in a program evaluation of an undergraduate athletic training education program. The study will focus on the current students, clinical instructors and alumnus perspective on clinical education and student readiness upon graduation. You were chosen for the study because you are a current student, clinical instructor or graduate of the athletic training program. Please read this form and ask any questions you have before agreeing to be part of the study.

This study is being conducted by a Brandy Perdue Clemmer who is a doctoral student at Gardner-Webb University.

Background Information:

The purpose of this study is to

1, Determine the perceptions of students and clinical instructors regarding the delivery of clinical education.

2. To determine student readiness for entry-level athletic training positions after graduation.

3. Determine the strengths and weakness of the clinical education aspect of the undergraduate athletic training education program.

Procedure

If you agree to be in this study

Current students are asked to complete the clinical education standards survey. This survey requires 30 minutes and is focused on the students overall ACI experience.

Alumni are asked to complete the clinical education standards survey. This survey requires 30 minutes and is focused on the alumnus overall ACI experience. Alumni are asked to complete a second alumni survey that will provide an overview of the clinical experience. This survey will take 10 minutes and focus on student readiness and the strengths and weakness of the clinical educational program.

Clinical instructors are asked to complete the clinical education standard survey. This survey requires 30 minutes and is focused on the clinical instructors self evaluation as ACIs in the clinical setting. Clinical instructors are also asked to explain their instructional delivery methods based on each standard.

Voluntary Nature of the Study:
Your participation in the study is voluntary. This means that everyone will respect your decision of whether you not you want to be in the study. If you decide to join the study now, you can change your mind later. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Compensation:
There will be no compensation for your participation in the study.

Confidentiality:
Any information you provide will be kept anonymous. The researcher will not use your information for any purpose outside of this research project. Also, the researcher will not include your name, place of employment, or anything that could identify you in any reports of the study.

Contacts and Questions:
The researcher's name is Brandy Perdue Clemmer. The researcher's committee chair is Dr. Ron Nanny. If you have any questions you may contact the researcher via 704-408-7180 or brandyclemmer@yahoo.com.

The researcher will keep a copy of this form and you will receive a copy of this form to keep.

Statement of Consent:

___ I have read the above information. I have received answers to any questions I have at this time. I am 18 years of age or older, and I consent to participate in the study.

Printed Name of Participant_____

Participant's Written or Electronic Signature_____

Researcher's Written or Electronic Signature_____

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, and "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just a valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix C

Evaluation of Athletic Training Approved Clinical Instructors
Student/Peer Assessment Form

SELECTION, TRAINING, AND EVALUTATION OF ATHLETIC TRAINGING
APPROVED CLINICAL INSTRUCTORS (ACI)
Student/Peer Assessment Form

Purpose
The purpose of this form is to help select, train, and evaluate Approved Clinical Instructors (ACI'S) for athletic training. We recommend that the seven standards and associated criteria listed below be used as guidelines, not as minimal requirements. These standards/criteria were developed in a National Athletic Trainers' Association-Research and Education Foundation research project and are considered to be clear, necessary, and appropriate for ACI's in a variety of athletic training clinical education settings.

Identification of Approved Clinical Instructor
Name of ACI: _____

Please check if you are: Colleague _____or   Student _____

Date: _____

Employment setting
____College/University Athletic Training Facility
____High School Athletic Training Facility
____Community-based Health Care Facility (e.g., sports medicine clinic)

Name of institution/setting:_____
Address:_____
Street   City   State   Zip
Telephone: (   )_____ Email: _____

Definition of terms
Approved Clinical Instructor: An Approved Clinical Instructor (ACI) is a NATABOC Certified Athletic Trainer with a minimum of one year of work experience as an athletic trainer, and who has completed Approved Clinical Instructor training. An ACI provides formal instruction and evaluation of clinical proficiencies in classroom, laboratory, and/or in clinical education experiences through direct supervision of athletic training students.
Clinical Instructor: A clinical Instructor (CI) is a NATABOC certified athletic trainer or other qualified health care professional with a minimum of one year work experience in their respective academic or clinical area. Clinical instructors teach, evaluate, and supervise athletic training students in the field experiences. A clinical instructor is not charged with the final formal evaluation at athletic training students' integration of clinical proficiencies. A clinical instructor may also be an ACI.

Use the standards and associated criteria below as guidelines to select, train, and/or evaluate an ACI.

Standard 1.0

The approved clinical instructor (ACI) demonstrates legal and ethical behavior that meets the expectation of the profession of athletic training.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 1.1
The ACI holds the appropriate credential (NATABOC certification and state license, registration, certification and state license, registration, certification, or exemption, if applicable) as required by the state in which the individual provides athletic training services.
Yes _____   No _____

Criterion 1.2
The ACI provides athletic training services that are defined by the Role Delineation Study and within the scope of the respective state practice act (if applicable).
1   2   3   4   5   Unknown

Criterion 1.3
The ACI provides athletic training services that are consistent with state and federal legislation. Examples include equal opportunity and affirmative action policies, ADA, HIPAA, and FERPA.
1   2   3   4   5   Unknown

Criterion 1.4
The ACI demonstrates ethical behavior as defined by the NATA Code of Ethics and the NATABOC Standards of Professional Practice.
1   2   3   4   5   Unknown

Standard 2.0
The approval clinical instructor (ACI) demonstrates effective communication skills.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 2.1
The ACI communicates with the Program Director and/or Clinical Education Coordinator regarding athletic training students' progress towards clinical education goals at regularly scheduled intervals determined by the athletic training education program.
1   2   3   4   5   Unknown

Criterion 2.2
The ACI uses appropriate forms of communication to clearly and concisely express him/herself to athletic training students, both verbally and in writing.
1   2   3   4   5   Unknown

Criterion 2.3
The ACI provides appropriately timed and constructive formative and summative feedback to athletic training students.
1   2   3   4   5   **Unknown**

Criterion 2.4
The ACI facilitates communication with athletic training students through open-ended questions and directed problem solving.
1   2   3   4   5   **Unknown**

Criterion 2.5
The ACI ensures time for on-going professional discussions with the athletic training student in the clinical setting.
1   2   3   4   5   **Unknown**

Criterion 2.6
The ACI communicates with athletic training students in a non-confrontational and positive manner.
1   2   3   4   5   **Unknown**

Criterion 2.7
The ACI receives and responds to, feedback from the Program Director and/or Clinical Education Coordinator, and athletic training students.
1   2   3   4   5   **Unknown**

Standard 3.0
The approved clinical instructor (ACI) demonstrates appropriate and professional interpersonal relationships.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 3.1
The ACI forms appropriate and professional relationships with athletic training students.
1   2   3   4   5   **Unknown**

Criterion 3.2
The ACI models appropriate and professional interpersonal relationships when interacting with athletic training students, colleagues, patients/athletes, and administrators.
1   2   3   4   5   **Unknown**
Criterion 3.3
The ACI appropriately advocates athletic training students when interacting with colleagues, patients/athletes, and administrators.
1   2   3   4   5   **Unknown**

Criterion 3.4

The ACI is a positive role model and/or mentor for athletic training students.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 3.5

The ACI demonstrates respect for gender, racial, ethnic, religious, and individual differences when interacting with people.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 3.6

The ACI has an open and approachable demeanor to athletic training students when working in the clinical setting.

1   **2**   **3**   **4**   **5**   **Unknown**

Standard 4.0

The approved clinical instructor (ACI) demonstrates effective instructional skills.
Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 4.1

The ACI collaborates with the Program Director and/or Clinical Education Coordinator to plan learning experiences.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.2

The ACI implements, facilitates, and evaluates planned learning experiences with athletic training students.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.3

The ACI understands the athletic training students' academic curriculum, level of didactic preparation, and current level of performance, relative to the goals of the clinical education experience.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.4

The ACI takes advantage of teachable moments during planned and unplanned learning experiences by instructing skills or content that is meaningful and immediately applicable.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.5

The ACI employs a variety of teaching styles to meet individual athletic training students' needs.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.6
The ACI helps athletic training students' progress towards meeting the goals and objectives of the clinical experience as assigned by the Program Director and/or Clinical Education Coordinator.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.7
The ACI modifies learning experiences based on the athletic training students' strengths and weaknesses.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.8
The ACI creates learning opportunities that actively engage athletic training students in the clinical setting and that promote problem-solving and critical thinking.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.9
The ACI encourages self-directed learning activities for the athletic training students when appropriate.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.10
The ACI performs regular self-appraisal of his/her teaching methods and effectiveness.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.11
The ACI is enthusiastic about teaching athletic training students.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.12
The ACI communicates complicated/detailed concepts in terms that students can understand based on their level of progression within the athletic training education program.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.13
The ACI encourages athletic training students to engage in self-directed learning as a means of establishing life-long learning practices of inquiry and clinical problem solving.

1   **2**   **3**   **4**   **5**   **Unknown**

Standard 5.0
The approved clinical instructor (ACI) demonstrates effective supervisory and administrative skills when working with athletic training students.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 5.1
The ACI directly supervises athletic training students during formal acquisition, practice, and evaluation of the Entry-Level Athletic Training Clinical Proficiencies.
1   2   3   4   5   Unknown

Criterion 5.2
The ACI intervenes on behalf of the athlete/patient when the athletic training student is putting the athlete/patient at risk or harm.
1   2   3   4   5   Unknown

Criterion 5.3
The ACI encourages athletic training students to arrive at clinical destinations on their own according to their level of education and clinical experience.
1   2   3   4   5   Unknown

Criterion 5.4
The ACI applies the clinical education policies, procedures, and expectations of the Athletic Training Education Program.
1   2   3   4   5   Unknown

Criterion 5.5
The ACI presents clear performance of expectations to athletic training students at the beginning and throughout the learning experience.
1   2   3   4   5   Unknown

Criterion 5.6
The ACI informs athletic training students of relevant policies and procedures of the clinical setting.
1   2   3   4   5   Unknown

Criterion 5.7
The ACI provides feedback to athletic training students from information acquired from direct observation, discussion with others and from review of athlete/patient documentation.
1   2   3   4   5   Unknown

Criterion 5.8
The ACI treats the athletic training students' presence as educational and not as a means for providing medical coverage.
1   2   3   4   5   Unknown

Criterion 5.9
The ACI completes the athletic training students' evaluation forms requested for the Athletic Training Education Program in a timely fashion.
1   2   3   4   5   Unknown

Criterion 5.10
The ACI provides the Program Director and/or Clinical Education Coordinator with requested materials as required for the accreditation process.
1   2   3   4   5   Unknown

Criterion 5.11
The ACI collaborates with athletic training students to arrange quality clinical education experiences which are compatible with the students' academic schedule.
1   2   3   4   5   Unknown

Standard 6.0
The approved clinical instructor (ACI) effectively evaluates athletic training student performance.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 6.1
The ACI notes the athletic training students' knowledge, skills, and behaviors as they relate to the specific goals and objectives of their clinical experience.
1   2   3   4   5   Unknown

Criterion 6.2
The ACI communicates with the Program Director and/or Clinical Education Coordinator regarding implementing and/or clarifying the Athletic Training Education Program's performance evaluation instruments.
1   2   3   4   5   Unknown

Criterion 6.3
The ACI records student progress based on performance criteria established by the Athletic Training Education Program and identifies areas of competence as well as areas that require improvement.
1   2   3   4   5   Unknown

Criterion 6.4
The ACI approaches the evaluation process as constructive and educational.
1   2   3   4   5   Unknown

Criterion 6.5
The ACI communicates with the Program Director and/or Clinical Education Coordinator in a timely manner when an athletic training student needs remediation.
1   2   3   4   5   Unknown

Criterion 6.6
The ACI and athletic training students participate in formative (i.e., on-going specific feedback) and summative (i.e., general overall performance feedback) evaluations.

| 1 | 2 | 3 | 4 | 5 | **Unknown** |

Standard 7.0
The approved clinical instructor (ACI) demonstrates clinical skills and knowledge which meet or exceed the athletic training education competencies and clinical proficiencies.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 7.1
The ACI is capable of teaching and evaluating the clinical proficiencies which are particular to their setting or environment.

| 1 | 2 | 3 | 4 | 5 | **Unknown** |

Criterion 7.2
The ACI's knowledge and skills are current and support care decisions based on science and evidence-based practice.

| 1 | 2 | 3 | 4 | 5 | **Unknown** |

Criterion 7.3
The ACI maintains his/her clinical skills and knowledge through participation in continuing education programs.

| 1 | 2 | 3 | 4 | 5 | **Unknown** |

Comments regarding strengths, weaknesses, and/or suggestions for improvement:

Appendix D

Evaluation of Athletic Training Approved Clinical Instructors
Clinical Instructor Educator Assessment Form

SELECTION, TRAINING, AND EVALUTATION OF ATHLETIC TRAINGING
APPROVED CLINICAL INSTRUCTORS (ACI)
Clinical Instructor Educator Assessment Form

Purpose
The purpose of this form is to help select, train, and evaluate Approved Clinical Instructors (ACI'S) for athletic training. We recommend that the seven standards and associated criteria listed below be used as guidelines, not as minimal requirements. These standards/criteria were developed in a National Athletic Trainers' Association-Research and Education Foundation research project and are considered to be clear, necessary, and appropriate for ACI's in a variety of athletic training clinical education settings.

Identification of Clinician
Name: _____
NATABOC certification #: _____
Credential to practice in State? (If applicable) _____Yes _____No
Years of clinical experience: _____
Employment setting
____College/University Athletic Training Facility
____High School Athletic Training Facility
____Community-based Health Care Facility (e.g., sports medicine clinic)
Date: _____
Name of institution/setting:_____
Name of person completing form:_____

Definition of terms
Approved Clinical Instructor: An Approved Clinical Instructor (ACI) is a NATABOC Certified Athletic Trainer with a minimum of one year of work experience as an athletic trainer, and who has completed Approved Clinical Instructor training. An ACI provides formal instruction and evaluation of clinical proficiencies in classroom, laboratory, and/or in clinical education experiences through direct supervision of athletic training students.
Clinical Instructor: A clinical Instructor (CI) is a NATABOC certified athletic trainer or other qualified health care professional with a minimum of one year work experience in their respective academic or clinical area. Clinical instructors teach, evaluate, and supervise athletic training students in the field experiences. A clinical instructor is not charged with the final formal evaluation at athletic training students' integration of clinical proficiencies. A clinical instructor may also be an ACI.

Use the standards and associated criteria below as guidelines to select, train, and/or evaluate an ACI.

Standard 1.0
The approved clinical instructor (ACI) demonstrates legal and ethical behavior that meets the expectation of the profession of athletic training.

In what ways do you insure that students understand the ethical and legal behavior expected in the athletic training profession?

_____
_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 1.1
The ACI holds the appropriate credential (NATABOC certification and state license, registration, certification and state license, registration, certification, or exemption, if applicable) as required by the state in which the individual provides athletic training services.
Yes _____   No _____

Criterion 1.2
The ACI provides athletic training services that are defined by the Role Delineation Study and within the scope of the respective state practice act (if applicable).
1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 1.3
The ACI provides athletic training services that are consistent with state and federal legislation. Examples include equal opportunity and affirmative action policies, ADA, HIPAA, and FERPA.
1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 1.4
The ACI demonstrates ethical behavior as defined by the NATA Code of Ethics and the NATABOC Standards of Professional Practice.
1   **2**   **3**   **4**   **5**   **Unknown**

Standard 2.0
The approval clinical instructor (ACI) demonstrates effective communication skills.

- What strategies do you use to insure that students understand the importance of effective communication with coaches, patients and peers?

  _____
  _____
  _____

Use the following scale to respond to the criteria listed below for this standard:

1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 2.1
The ACI communicates with the Program Director and/or Clinical Education Coordinator regarding athletic training students' progress towards clinical education goals at regularly scheduled intervals determined by the athletic training education program.
1   2   3   4   5   Unknown

Criterion 2.2
The ACI uses appropriate forms of communication to clearly and concisely express him/herself to athletic training students, both verbally and in writing.
1   2   3   4   5   Unknown

Criterion 2.3
The ACI provides appropriately timed and constructive formative and summative feedback to athletic training students.
1   2   3   4   5   Unknown

Criterion 2.4
The ACI facilitates communication with athletic training students through open-ended questions and directed problem solving.
1   2   3   4   5   Unknown

Criterion 2.5
The ACI ensures time for on-going professional discussions with the athletic training student in the clinical setting.
1   2   3   4   5   Unknown

Criterion 2.6
The ACI communicates with athletic training students in a non-confrontational and positive manner.
1   2   3   4   5   Unknown

Criterion 2.7
The ACI receives and responds to, feedback from the Program Director and/or Clinical Education Coordinator, and athletic training students.
1   2   3   4   5   Unknown

Standard 3.0
The approved clinical instructor (ACI) demonstrates appropriate and professional interpersonal relationships.

How do you emphasize and demonstrate the importance of interpersonal relationships in the clinical setting? _____

_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 3.1
The ACI forms appropriate and professional relationships with athletic training students.
1   2   3   4   5   Unknown

Criterion 3.2
The ACI models appropriate and professional interpersonal relationships when interacting with athletic training students, colleagues, patients/athletes, and administrators.
1   2   3   4   5   Unknown

Criterion 3.3
The ACI appropriately advocates athletic training students when interacting with colleagues, patients/athletes, and administrators.
1   2   3   4   5   Unknown

Criterion 3.4
The ACI is a positive role model and/or mentor for athletic training students.
1   2   3   4   5   Unknown

Criterion 3.5
The ACI demonstrates respect for gender, racial, ethnic, religious, and individual differences when interacting with people.
1   2   3   4   5   Unknown

Criterion 3.6
The ACI has an open and approachable demeanor to athletic training students when working in the clinical setting.
1   2   3   4   5   Unknown

Standard 4.0
The approved clinical instructor (ACI) demonstrates effective instructional skills.

Please list the different instructional methods you use in the clinical setting to insure candidate readiness?_____

_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 4.1
The ACI collaborates with the Program Director and/or Clinical Education Coordinator to plan learning experiences.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.2
The ACI implements, facilitates, and evaluates planned learning experiences with athletic training students.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.3
The ACI understands the athletic training students' academic curriculum, level of didactic preparation, and current level of performance, relative to the goals of the clinical education experience.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.4
The ACI takes advantage of teachable moments during planned and unplanned learning experiences by instructing skills or content that is meaningful and immediately applicable.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.5
The ACI employs a variety of teaching styles to meet individual athletic training students' needs.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.6
The ACI helps athletic training students' progress towards meeting the goals and objectives of the clinical experience as assigned by the Program Director and/or Clinical Education Coordinator.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.7
The ACI modifies learning experiences based on the athletic training students' strengths and weaknesses.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.8
The ACI creates learning opportunities that actively engage athletic training students in the clinical setting and that promote problem-solving and critical thinking.

1   **2**   **3**   **4**   **5**   **Unknown**

Criterion 4.9
The ACI encourages self-directed learning activities for the athletic training students when appropriate.
1   2   3   4   5   Unknown

Criterion 4.10
The ACI performs regular self-appraisal of his/her teaching methods and effectiveness.
1   2   3   4   5   Unknown

Criterion 4.11
The ACI is enthusiastic about teaching athletic training students.
1   2   3   4   5   Unknown

Criterion 4.12
The ACI communicates complicated/detailed concepts in terms that students can understand based on their level of progression within the athletic training education program.
1   2   3   4   5   Unknown

Criterion 4.13
The ACI encourages athletic training students to engage in self-directed learning as a means of establishing life-long learning practices of inquiry and clinical problem solving.
1   2   3   4   5   Unknown

Standard 5.0
The approved clinical instructor (ACI) demonstrates effective supervisory and administrative skills when working with athletic training students.

With all the demands of clinical education and patient care, what are your supervisory methods?
_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 5.1
The ACI directly supervises athletic training students during formal acquisition, practice, and evaluation of the Entry-Level Athletic Training Clinical Proficiencies.
1   2   3   4   5   Unknown

Criterion 5.2
The ACI intervenes on behalf of the athlete/patient when the athletic training student is putting the athlete/patient at risk or harm.
1   2   3   4   5   Unknown

Criterion 5.3
The ACI encourages athletic training students to arrive at clinical destinations on their own according to their level of education and clinical experience.
1   2   3   4   5   Unknown

Criterion 5.4
The ACI applies the clinical education policies, procedures, and expectations of the Athletic Training Education Program.
1   2   3   4   5   Unknown

Criterion 5.5
The ACI presents clear performance of expectations to athletic training students at the beginning and throughout the learning experience.
1   2   3   4   5   Unknown

Criterion 5.6
The ACI informs athletic training students of relevant policies and procedures of the clinical setting.
1   2   3   4   5   Unknown

Criterion 5.7
The ACI provides feedback to athletic training students from information acquired from direct observation, discussion with others and from review of athlete/patient documentation.
1   2   3   4   5   Unknown

Criterion 5.8
The ACI treats the athletic training students' presence as educational and not as a means for providing medical coverage.
1   2   3   4   5   Unknown

Criterion 5.9
The ACI completes the athletic training students' evaluation forms requested for the Athletic Training Education Program in a timely fashion.
1   2   3   4   5   Unknown

Criterion 5.10
The ACI provides the Program Director and/or Clinical Education Coordinator with requested materials as required for the accreditation process.
1   2   3   4   5   Unknown

Criterion 5.11
The ACI collaborates with athletic training students to arrange quality clinical education experiences which are compatible with the students' academic schedule.
1   2   3   4   5   Unknown

Standard 6.0

The approved clinical instructor (ACI) effectively evaluates athletic training student performance.

How do you continuously evaluate the athletic training student during clinical rotation?_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 6.1
The ACI notes the athletic training students' knowledge, skills, and behaviors as they relate to the specific goals and objectives of their clinical experience.
1   2   3   4   5   Unknown

Criterion 6.2
The ACI communicates with the Program Director and/or Clinical Education Coordinator regarding implementing and/or clarifying the Athletic Training Education Program's performance evaluation instruments.
1   2   3   4   5   Unknown

Criterion 6.3
The ACI records student progress based on performance criteria established by the Athletic Training Education Program and identifies areas of competence as well as areas that require improvement.
1   2   3   4   5   Unknown

Criterion 6.4
The ACI approaches the evaluation process as constructive and educational.
1   2   3   4   5   Unknown

Criterion 6.5
The ACI communicates with the Program Director and/or Clinical Education Coordinator in a timely manner when an athletic training student needs remediation.
1   2   3   4   5   Unknown

Criterion 6.6
The ACI and athletic training students participate in formative (i.e., on-going specific feedback) and summative (i.e., general overall performance feedback) evaluations.
1   2   3   4   5   Unknown

Standard 7.0
The approved clinical instructor (ACI) demonstrates clinical skills and knowledge which meet or exceed the athletic training education competencies and clinical proficiencies.

List the different instructional methods you use to evaluate and teach the clinical proficiencies.

_____
_____
_____
_____

Use the following scale to respond to the criteria listed below for this standard:
1 = Never;   2 = Seldom;   3 = Occasionally;   4 = Usually;   5 = Always

Criterion 7.1
The ACI is capable of teaching and evaluating the clinical proficiencies which are particular to their setting or environment.

1   2   3   4   5   Unknown

Criterion 7.2
The ACI's knowledge and skills are current and support care decisions based on science and evidence-based practice.

1   2   3   4   5   Unknown

Criterion 7.3
The ACI maintains his/her clinical skills and knowledge through participation in continuing education programs.

1   2   3   4   5   Unknown

Comments regarding strengths, weaknesses, and/or suggestions for improvement:_____
_____
_____

Appendix E

Alumni Athletic Training Student Survey

Alumni Athletic Training Student Survey

Clinical Education

1. What year did you graduate from the program?
2. Are currently acting as a Licensed Athletic Trainer

Yes
No

Other professional credentials, if no, what is your current profession?

3. The Clinical experience at your undergraduate program prepared you for entry-level employment.

Agree
Disagree
Strongly Agree
Strongly Disagree

4. The clinical experience in your undergraduate program prepared you to take the NATABOC.

Agree
Disagree
Strongly Agree
Strongly Disagree

5. The Clinical education in you undergraduate program exposed you to a variety of clinical settings.

Agree
Disagree
Strongly Agree
Strongly Disagree

6. To what extent did each clinical setting prepare you for entry-level employment or graduate school?

Dr./PT/PA Clinic Setting

_____
_____
____

High School Setting

_____
_____

College Sport Rotations

_____
_____
_____

What site had the greatest impact on your clinical experience and why?

_____
_____

7. The approved Certified Instructor(s) in your undergraduate program helped prepare you for entry-level placement after graduation?

Agree
Disagree
Strongly Agree
Strongly Disagree

What is the most important characteristic of an ACI?

_____
_____

8. There was effective coherence and communication between your clinical education and athletic training education classes.

Agree
Disagree
Strongly Agree
Strongly Disagree

9. What were the strengths of your clinical education in the undergrad athletic training program you attended?

    _____
    _____

10. What do you feel would have helped prepare you better for an entry-level position as an athletic trainer?

    _____
    _____
    _____