Thank you for that kind introduction. Let me first thank Dr. Stacy Walker, Chair of the Athletic Training Educators’ Conference Subcommittee of the Continuing Education Committee for the invitation and opportunity to share my perspectives on seeking greater relevance for athletic training education within American higher education and the healthcare professions.

My comments this morning are based on nearly 40 years of experience as an undergraduate program director, graduate program director, department chair, dean, and provost. I should also mention that I served as a clinical athletic trainer for the first 20 years of my career, including the ten years I worked my way through the tenure track from an assistant professor, to tenured associate professor, and then full professor. For you younger athletic training educators, I’m not sure I recommend this approach today given the increasingly rigorous standards for promotion and tenure.

This morning I will address six themes we might think about as athletic training educators, and that have the potential to enhance our relevance within higher education and the healthcare professions. These themes include some of the major challenges facing higher education, the value of a liberal education for our students, the importance of interprofessional education and practice, the rationale for diversity and inclusive excellence in Athletic Training, the evolution of Athletic Training as a health care profession, and the debate over the appropriate academic level for the professional degree in athletic training.

I will begin by sharing what I view as some of the major challenges facing higher education today. Then, I’ll discuss how our profession of Athletic Training might think about these challenges, including how we might achieve greater relevance in finding solutions.

Among the most profound changes has been the declining support from the states and the concomitant increase in the cost of a public higher education for students. For almost all states, this withdrawal of state support translates to a decrease in budgeted state appropriation per budgeted full time equivalent student. The percentage of state funding that supports the operating costs of
many public institutions has dwindled over the past decade, to the single digits in some states. As the economy improves, the bloodletting has slowed and many states are reinvesting in higher education. However, it seems highly unlikely state support will ever return to pre-great recession levels. This state of affairs requires all of us to think more entrepreneurially about how to conduct our academic programs.

Another significant challenge has been the increased level of accountability for public institutions of higher learning to retain and graduate students at a higher rate. Many states are linking the allocation of state funds to performance metrics such as first year retention, 4- and 6-year graduation rates, degree efficiency, and others. The best predictors of student success are family income and parental education. So, one solution is for institutions to admit students from wealthy families and whose parents attended college. Unfortunately, this solution threatens the accessibility of a higher education for first generation college students and students from underserved populations, including many ethnic minority students. I’ll talk more about how we can improve the success of our athletic training students later.

The final challenge I will mention, and perhaps the most alarming, relates to questions about the value of a higher education, coming not only from politicians but from some public citizens as well. College graduates have a substantially higher income over their lives and a lower unemployment rate than those without a college degree. More importantly, a case can be made that college graduates are more civically and globally engaged, better prepared to deal with complexity, diversity, and change, take greater advantage of available artistic and cultural opportunities, and have a greater sense of social responsibility. These are the virtues of a liberal education, and later I will talk about how this relates to our Athletic Training students.

These challenges to higher education lead me to a discussion of several issues I believe we should be thinking about as athletic training educators. They include the role of a liberal education for our students; emerging trends in interprofessional education and practice; diversity and inclusive excellence as a strategy for reducing healthcare disparities; and the transition of Athletic Training from Physical Education to the Health Professions, including some of the implications of potentially transitioning to graduate education as the entry point to the profession.
Let me continue with a discussion of the manner by which we are educating our undergraduate students and the extent to which we are providing them a liberal education. Much of what I have to say about this relates to the Association of American Colleges and Universities’ LEAP initiative, which stands for Liberal Education and America’s Promise.

By liberal education, I am not referring to left versus right in the political sense, but rather “an approach to college learning that seeks to empower individuals and prepare them to deal with complexity, diversity, and change.” The essential learning outcomes of a liberal education include Knowledge of Human Cultures and the Physical and Natural World, including global cultures, diversity, and sustainability; Intellectual and Practical Skills, including critical and creative thinking, and written and oral communication; Personal and Social Responsibility, including ethical reasoning and foundations and skills for lifelong learning; and Integrative and Applied Learning, including application and integration of learning.

Surveys of employers across multiple disciplines indicate they want colleges to place more emphasis on these essential learning outcomes. For example, 89% want more written and oral communication, 81% more critical thinking and analytic reasoning, 79% more applied knowledge in real-world settings, 75% more ethical decision making, 75% more complex problem solving, 71% more intercultural competence, 70% more science and technology, and 67% more global issues. We should assume employers of our athletic training students are seeking the same traits in our graduates.

To underscore this point, I’ll share one of my favorite anecdotes while serving as Provost. A few years ago the university was contacted by a fortune 500 financial management company that was considering a relocation to our community. They asked to visit with a small group of representatives of the university to explore the potential of our graduates as candidates for their workforce. Among the people they wanted to meet with was the Dean of the College of Arts and Sciences. They were interested in learning about the quality of liberal education our students were receiving, including the aforementioned essential learning outcomes; they had no interest in visiting with the Dean of the Business School.

The General Education taken by our students should address many of the aforementioned essential learning outcomes. For this reason, rather than advise
our students to “get your gen ed courses out of the way”, we should challenge them to immerse themselves in these courses because they develop the skills employers are looking for.

In addition to the Gen Ed curriculum, another set of educational practices – known as High-Impact Educational Practices – are critically important to positive educational outcomes. Examples of these high-impact practices include first-year seminars, learning communities, undergraduate research, capstone courses and projects, writing-intensive courses, collaborative assignments and projects, diversity/global learning, and service learning and community-based learning.

To box our students into a rigid program of study that doesn’t permit them to participate in a learning community, or spend time in a lab working with a faculty member on an undergraduate research project, or spend a semester studying abroad runs counter to the aims and best practices for a twenty-first century education. I urge you to think of ways to integrate high impact educational practices into your undergraduate athletic training education program.

One final point about high-impact educational practices as related to retention and graduation rates for undergraduate students. Four-year institutions of higher learning are under tremendous pressure to improve the success of undergraduate students. The National Center for Education Statistics, Institute of Education Services of the U.S. Department of Education reports that “about 59 percent of first-time, full-time students who began seeking a bachelor’s degree at a 4-year institution in fall 2006 completed that degree within 6 years.”

Students who engage in high impact educational practices – such as undergraduate research – report a higher level of satisfaction with their undergraduate experience. And they are retained and graduated at a higher rate. Yet another reason for you to think of ways to integrate high impact educational practices into your athletic training education program.

**Interprofessional Education and Practice**

Let me turn my attention to interprofessional education and interprofessional practice. In 2008 the National Athletic Trainers’ Association nominated me for an appointment to a national committee of the U.S. Department of Health and Human Services – the Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL). The committee was created by Congress to review programs
that support interdisciplinary, community-based training as part of the goals of the Health Resources and Services Administration (HRSA) and the Bureau of Health Professions. It advises the Secretary of Health and Human Services and Congress on programs concerning Area Health Education Centers, Health Education Training Centers, and the Burdick Program for Rural Interdisciplinary Training, and programs in geriatrics, allied health, chiropractic, and podiatric medicine. Each year the committee identifies a theme which serves as the basis for the report and set of recommendations that are made to the Secretary and Congress.

One theme during my tenure on this committee related to interprofessional approaches to healthcare, both in terms of the education of students and delivery of health care services by our clinicians. The Bureau of Health Professions defines interprofessional health care teams as “a group of diverse health care providers from differing health professions or disciplines working together to provide health care to individuals and communities. Inter-disciplinary health care teams are nonhierarchical and involve cooperation and compromise. Team members collaborate, plan, and coordinate an interdisciplinary program of care”. The World Health Organization Framework for Action on Interprofessional Education and Collaborative Practice 2010 defines IPE this way: “when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.”

Interprofessional health care teams are comprised of occupational therapists, physician assistants, physical therapists, a variety of human movement specialists, and should include athletic trainers – working together to deliver comprehensive health care services to individuals and communities. To solve the health care challenges facing our country will require that we break down our professional silos and work together to the benefit of our patients and clients. To become more relevant among the health care professions, athletic trainers must become a player on these interprofessional health care teams.

Interprofessional education in athletic training instruction could include courses common to the curriculum of multiple health care professions. Examples might include courses in professional ethics, multicultural competency, scientific writing, grantsmanship, medical aspects, entrepreneurship, and others. The variety of clinical settings in which our students gain experience should provide ample opportunities for interprofessional practice.
The 2012 report of the Advisory Committee on Interdisciplinary, Community-Based Linkages to the Secretary and Congress was entitled “Interprofessional Education and Practice with Implications for Primary Care in Healthcare Reform.” The report identified a number of challenges to widespread adoption of interprofessional education and practice at the national, state, and local or institutional levels. Challenges at the national level include lack of interprofessional accreditation standards, insufficient evaluation of the effectiveness of interprofessional education and practice, lack of resources for dissemination of best practices, reimbursement policies that provide disincentives for interprofessional care, and lack of interoperable information technology that inhibits communication and collaboration.

At the state level, a key challenge is lack of knowledge regarding scope of practice of other professions. Locally or institutionally, the challenges include insufficient faculty development, curriculum development and practice-level challenges within teams, involving differing or changing views of power, status, and authority.

Special challenges exist within athletic training. At this point the majority of our students are educated at the undergraduate level while the other health care professions’ students are predominantly educated at the graduate level. Additionally, many of our entry-level athletic training education programs exist in institutions where there are few if any linkages to the other health care professions. Our students need to be educated along with and beside other students in the health care professions. This would nurture a mutually respectful and collaborative approach to health care delivery before students become credentialed practitioners and enter the healthcare workforce.

The importance of interprofessional education is gaining traction in Athletic Training. In June of 2012, the NATA’s Board of Directors approved a recommendation from the Executive Committee for Education that IPE should be a required component of athletic training education at the professional and post-professional levels. A strategic plan to support this recommendation was developed, and included the development of a white paper on the topic by an Interprofessional Work Group of 23 educators.

The purpose of the white paper, and I quote from the document, was “(1) to inform the profession regarding IPE and IPP, including appropriate terminology, definitions, best evidence and the important role it plays in the future of health care; (2) to inform institutions, academic units and other professions about our
profession and the advantages of including AT in IPE and IPP initiatives; (3) to inform educators and clinicians regarding best practice, giving practical examples of how to get involved in IPE and IP: and (4) to inform the CAATE, providing evidence for inclusion of IPE and IPP in educational competencies.”

This white paper was presented to the NATA Board of Directors in March, 2014. I believe it provides a superb roadmap for advancing interprofessional education in Athletic Training, and is a must read for all athletic training educators.

**Diversity and Inclusive Excellence**

The next topic I would like to address is the importance of diversity and inclusive excellence in Athletic Training, both as a strategy to help diversify the healthcare workforce and to help reduce health disparities in our country. By definition, diversity is the state of being different, being accepting of people who are different than you. To become more diverse as a profession is to become more inclusive and accepting of colleagues, athletes, and patients regardless of race, national origin, color, religion, sex, age, sexual orientation, gender identity/expression, status as a person with a disability, genetic information, or Protected Veteran status.

In 2002, while serving as Editor-in-Chief of the Journal of Athletic Training, I wrote an editorial entitled “Promoting Diversity in Athletic Training”. Later, in 2003 I had the honor of delivering the William E. “Pinky” Newell Memorial Address at the Eastern Athletic Trainers’ Association Annual Meeting. The editorial and EATA address defined diversity, questioned why we are having so much trouble diversifying our profession, and proposed strategies for how we can become more successful.

In 2003 the NATA’s web page reported that 87% of the certified membership was Caucasian, 1% Black, 2% Hispanic, and 3% Asian or Pacific Islander. Comparatively, today’s numbers are 81% Caucasian, 3.5% Black, 4.2% Hispanic, and 3.5% Asian or Pacific Islander. We are making progress in diversifying our profession, but that progress has been slow; we must not relent in our efforts.

A diverse healthcare workforce is inextricably linked to solving the health disparities that exist between non-minority and minority populations in our country. The 2011 National Healthcare Quality and Disparities Report underscores the nature of the problem: health care quality and access are suboptimal for
minority and low-income populations, and overall healthcare quality is improving, but not for access and disparities.

The Institute of Medicine of the National Academies reports several benefits to racial and ethnic diversity among health care providers. They include: racial and ethnic health care providers are more likely to serve minority and medically underserved communities, thereby increasing access to care; racial and ethnic minority patients report greater levels of satisfaction with care provided by minority health care professionals; and racial and ethnic health care providers can help health systems in efforts to reduce cultural and linguistic barriers and improve cultural competence.

The Center for Disease Control’s Office of Minority Health and Health Disparities has offered this guiding principle for improving minority health: “The future health of the nation will be determined to a large extent by how effectively we work with communities to reduce and eliminate health disparities between non-minority and minority populations experiencing disproportionate burdens of disease, disability, and premature death.” I believe there are many untapped opportunities for athletic training to join inter-professional health care teams to eliminate health disparities that occur by gender, race or ethnicity, education or income, disability, geographic location, or sexual orientation. This would significantly enhance our profession’s relevance among the health care professions.

The challenge of underrepresentation of ethnic minorities among the health care professions is not unique to Athletic Training. I think athletic training has an opportunity to serve as a model for all of the healthcare professions – but we have a great deal of work to do.

In its report, Missing Persons: Minorities in the Health Professions, the Sullivan Commission on Diversity in the Healthcare Workforce stated that while African Americans, Hispanic Americans, and American Indians, as a group, constitute nearly 25 percent of the U.S. population, these three groups account for less than 9 percent of nurses, 6 percent of physicians, and only 5 percent of dentists. The Commission’s report explained that “diversity in the health workforce will strengthen cultural competence throughout the health system”, and that “cultural competence profoundly influences how health professionals deliver health care”. Among the report’s many recommendations was that “key stakeholders in the health system should promote training in diversity and cultural competence for health professions students, faculty, and providers”.

8
The challenges we face in the athletic training profession are the same as the health care professions cited in the Sullivan Commission’s report, and others to which we are more closely compared. I said a moment ago that the National Athletic Trainers’ Association reports that 81% of the membership is Caucasian, 3.5% Black, 4.2% Hispanic, and 3.5% Asian or Pacific Islander. You can see from this table that the diversity statistics for Physical Therapy, Occupational Therapy, and Speech-Language-Pathology differ little from Athletic Training. The changing demographics of the U.S. population make it increasingly likely that certified athletic trainers will encounter a diverse patient population regardless of clinical practice setting. Indeed, the NCAA reports approximately 35% of all athletes in all divisions are of color, and essentially half of division I football and men’s and women’s basketball players are African American.

The underrepresentation of ethnic minority health care professionals underscores the importance of including cultural competence in our athletic training education programs. A culturally competent health care workforce – that includes certified athletic trainers – is also essential to addressing the challenge of health care disparities among African Americans, Hispanics and low-income children and adults. The concept of cultural competence transcends one’s ability to understand and communicate with a patient of a different racial or ethnic background. To be a culturally competent and aware athletic trainer requires an understanding of delivery of health care to all individuals, regardless of race, ethnicity, sexual identity, sexual orientation, religion, class, and ability – both physical and cognitive.

Cultural competence mandates that each and every one of us do all we can to help diversify the athletic training profession. We can promote diversity within our health care profession by embracing the many initiatives promoted by the Ethnic Diversity Advisory Committee and becoming more literate about diversity and inclusiveness in athletic training education and clinical practice. Our secondary school athletic trainers can have a huge impact on helping to further diversify our profession. They serve as role models for young people at a time when they are beginning to think about what they want to do with their lives. They can encourage the ethnic minority students with whom they interact and who have an interest in the healthcare professions to consider athletic training.

I challenge each and every one of you to think creatively about how we can diversify our health care profession. Let me give you an example of how I try to continually think about this. Last semester and shortly after arriving at the
University of Utah, I proposed to the Dean of the Honors College the creation of a Pre-Health Professions Living and Learning Community. The goal of the LLC would be to strategically recruit students from underserved and ethnic minority populations to consider many of the medical and health care professions – including Athletic Training. Five thousand dollar housing scholarships will be provided to participants through contributions from the involved colleges and through private giving. It remains to be seen how successful this initiative will be, but it does illustrate how we can think creatively about diversifying the health care professions.

A final word about diversity. Over the years I have learned that there is another and perhaps more important dimension to diversity, and that is inclusiveness. Let me tell you what I am talking about.

When I became Provost, one of my first actions was to create a sub-committee of the Deans Council to address recruitment and retention of ethnic minority faculty. We had the most diverse student body of the campuses in the UNC system, and I thought we should be having similar success with the diversity of our faculty. The work of the sub-committee taught me that being diverse does not necessarily mean being inclusive. I learned that some of our ethnic minority faculty felt isolated and did not feel respected within their departments. This revelation led to a much broader conversation on our campus about diversity, equity and inclusion for everyone. The campus now strives to maintain a climate of equity and respect, where the rights of all are protected to ensure that every member feels empowered, valued, and respected for their contributions to the mission of the university.

I believe athletic training can gain greater relevance among the healthcare professions by serving as a model for how to diversify the workforce. To accomplish this goal we must ensure that our athletic training rooms, clinics, and classrooms provide an inclusive environment where everyone feels empowered, valued, and respected.

**Athletic Training: From Physical Education to the Health Care Professions**

The final theme I wish to discuss relates to our transition to a health care profession, our academic home within higher education, and the implications of a potential transition to graduate education as the entry point to the profession. (Slide #15) In 2007 I published a paper in the journal Quest entitled “Athletic
Training: From Physical Education to Allied Health”. This article expanded upon the seminal 1999 paper by Delforge and Behneke in the Journal of Athletic Training – “The History and Evolution of Athletic Training Education in the United States”.

These papers remind us that athletic training education programs were originally spawned from departments of physical education, and in my view we owe a debt of gratitude to our physical education colleagues for that opportunity. Since that time, our academic programs have grown in sophistication as the body of knowledge required to practice as a certified athletic trainer has dramatically expanded.

In 2006, recommendations for athletic training education reform included a recommendation that our educational programs move to academic units of the health-related professions. This recommendation followed another from nine years earlier when the NATA Education Task Force recommended that “The NATA should encourage new athletic training education programs to consider aligning themselves in colleges of health-related professions.” Interestingly, while more of our educational programs can be found in units of the health-related professions, the majority remain within departments affiliated with kinesiology and/or the sub-disciplines of human performance.

This leads me to the difficult question of what is the appropriate academic level for the professional degree in Athletic Training. But first let me present some definitions to ensure we are all on the same page. Currently the Bachelor’s degree in Athletic Training is the entry level degree and requirement to sit for the BOC certification examination. A number of entry-level master’s degree programs have also been established, providing the opportunity to sit for the exam by earning a graduate degree.

A professional master’s degree is designed as the entry level degree and requirement to sit for a credentialing examination to enter a healthcare profession. This is the degree that is currently being discussed as the entry-level degree and requirement to sit for the certification exam in our profession.

Several healthcare professions have created clinical doctorates, and there are two types. A professional clinical doctorate is an entry-level degree that qualifies one to sit for a credentialing examination. Perhaps the example with which we are most familiar is the DPT, or Doctor of Physical Therapy. Other examples are the DNP, or Doctor of Nursing Practice and AUD, or Doctor of Audiology.
A post-professional clinical doctoral degree is designed for students already credentialed in a healthcare profession. We are beginning to see creation of the Doctor of Athletic Training degree in a few institutions across the country, and this is our profession’s version of a post-professional clinical doctorate.

And finally, there are the traditional academic doctoral degrees, such as the PhD and EdD. These degrees are designed to prepare individuals to contribute to the body of knowledge in one’s field through research and discovery.

You might be interested to know that currently 2093 of 42849 members of the NATA hold a doctoral degree: 848 the DPT, 753 a PhD, and the remainder other types of doctoral degree.

Now, let me return to the question of what is the appropriate academic level for the professional degree in Athletic Training. In 2012, the NATA Board of Directors approved a recommendation from the Executive Committee for Education that there be a critical examination of the appropriate degree level for preparation as an athletic trainer. In response to that recommendation, a group of our colleagues prepared and submitted the report – “Professional Education in Athletic Training: An Examination of the Professional Degree Level” to the Board of Directors at the end of 2013. In my opinion, this document makes a compelling case that professional education in athletic training should occur at the master’s degree level.

Several of the key findings in this report link closely to the themes of my presentation today and athletic training’s relevance within higher education and the healthcare professions. For example, the richness of the liberal education students receive might be enhanced if athletic training education occurred at the master’s degree level. The interprofessional education and practice opportunities for our students would be greater with other health care professions at the same degree level. And the migration of athletic training education programs to schools and colleges of the health professions – comprised of graduate programs in Physician Assistant, Physical Therapy, Occupational Therapy, Speech and Hearing, and perhaps others – might be accelerated.

Clearly, a transition to professional education at the graduate level is complex, and we should carefully explore the potential implications. For example, at my own institution we have a fine post-professional graduate program that provides 16 fully funded graduate assistantships for certified athletic trainers to earn a
master’s degree. What would be the impact of a professional master’s degree on these programs?

To move to a requirement for a professional master’s degree to sit for certification also creates a series of interesting questions for education in our field at the doctoral level. Would students who complete a professional master’s degree want to complete a post-professional master’s degree? Or would they be more inclined to want a post-professional clinical doctorate such as a Doctor of Athletic Training degree?

Other disciplines have created professional and/or post-professional doctoral degrees, such as the DPT, OTD, AUD, and others. And my colleagues in physical therapy, occupational therapy, and audiology tell me these degrees have exacerbated the challenge of finding research-prepared PhDs in their fields. What would be the impact of a DAT on faculty recruitment and research in our profession, and how would the DAT be viewed by deans and department chairs?

I stated earlier that the recent report examining the professional degree level makes a compelling case for a transition to the professional master’s degree. That said, equally compelling arguments can be made against the case for requiring a professional master’s degree for entry into the profession. Disagreements of this nature always exist when professions face such difficult evolutionary decisions.

Some of you in this room are old enough to remember the debate surrounding the decision to eliminate the internship route to certification. I recall some very prominent members of our profession predicting certain doom for athletic training if the internship route to certification was eliminated. The current debate is necessary and healthy. Let’s keep in mind that these kinds of landmark decisions in the life of a professional organization never have a perfect outcome and are always accompanied by at least some unintended consequences.

Very recently, you probably received an email from the CAATE soliciting open comment on the appropriate level for the professional degree in athletic training. We should all weigh in with our individual perspectives on the issue, and then rally together to make athletic training the best health care profession possible, regardless of the decision.

Let me bring my presentation to a close with a few key summary points. American higher education is undergoing a major transformation and athletic training educators need to think about how to be on the playing field rather than the sideline; the interprofessional education and practice train has left the station and
it behooves us to be on board; a continued emphasis on diversity and inclusive excellence can enhance our standing among the healthcare professions; and we should continue to think about how to more closely align our academic programs with the other healthcare professions. In my view there has not been a more exciting time to think about athletic training’s role in higher education and the healthcare professions.

You have been more than gracious with your time and attention this morning, and for that I am most grateful. I leave you with this quote from my fellow Vermonter, John Dewey, the American philosopher and educational reformer: “If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

Thank you very much.