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COMMENTARY

Seeking Greater Relevance for Athletic Training Education Within American Higher Education and the Health Care Professions

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This paper addresses several of the challenges facing today's system of higher education, and discusses the implications of these challenges for the athletic training profession. Among the major challenges are cost, accountability, access, and value of a higher education. The paper next focuses on several issues about which athletic training educators should be thinking. They include the importance of a liberal arts education at the undergraduate level, athletic training's role in interprofessional education and practice, and the importance of diversity and inclusive excellence in helping to diversify the health care workforce and reduce health disparities. The paper concludes with a discussion of the evolution of athletic training from physical education to the health care professions and the transition to the professional master's degree as the entry-level degree in athletic training. The contents of this paper are based largely on the keynote address at the 2015 National Athletic Trainers' Association Athletic Training Educators' Conference in Dallas, Texas, February 27–March 1.

Key Words: Liberal arts, diversity, education value, education cost

INTRODUCTION

The perspectives presented in this paper are based on the author's nearly 40 years of experience as an undergraduate program director, graduate program director, department chair, dean, provost, and, for the first 20 years of his career, clinical athletic trainer. The paper will begin by addressing some of the major challenges facing higher education today. A discussion of how the profession of athletic training might think about these challenges as a strategy to achieve greater relevance in finding solutions will be addressed.

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 athletic training educators to think more entrepreneurially about how to conduct our academic programs.

Another significant transformation 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 access to a higher education for first-generation college students and students from underserved populations, including many ethnic minority students. The manner by which athletic training programs (ATPs) can improve the success of our athletic training students will be addressed later.

The final challenge addressed in this paper, 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 lifespan 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; are 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

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education, and how this relates to our athletic training students will be discussed later.

These challenges to higher education lead to a discussion of 4 issues about which athletic training educators should be thinking. They include the role of a liberal education for ATP students, emerging trends in interprofessional education (IPE) and interprofessional practice (IPP), diversity and inclusive excellence as a strategy for reducing health care disparities, and the transition of athletic training from physical education to the health professions, including some of the implications of the transition to a master's degree as the entry point to the profession.

LIBERAL EDUCATION AND AMERICA'S PROMISE

The Association of American Colleges and Universities' Liberal Education and America's Promise (more commonly known as "LEAP") initiative[1] serves as the basis for 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.

The concept of a liberal education does not refer 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."[1(p3)] 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.[1] 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. It is likely employers are seeking the same traits in our ATP graduates. The general education taken by athletic training students should address many of the aforementioned essential learning outcomes. For this reason, rather than students' being advised to get their general education courses out of the way, they should be challenged to immerse themselves in these courses because they develop the skills employers are seeking.

In addition to the general education curriculum, another set of educational practices—known as high-impact educational practices[1]—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, service and community-based learning, and internships. To box athletic training students into a rigid program of study that does not permit them to participate in a learning community, 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 21st-century education. Program directors should think of ways to integrate high-impact educational practices into undergraduate ATPs.

One final point about high-impact educational practices relates 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 US Department of Education[2] reports, "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."[(p1)] 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 program directors to think of ways to integrate high-impact educational practices into ATPs.

IPE AND IPP

The Bureau of Health Professions defines *interprofessional health care team* as

> *a group of diverse health care providers from differing health professions or disciplines working together to provide health care to individuals and communities. Interdisciplinary health care teams are nonhierarchical and involve cooperation and compromise. Team members collaborate, plan, and coordinate an interdisciplinary program of care.*[3]

The World Health Organization Framework for Action on Interprofessional Education and Collaborative Practice 2010 states IPE is "when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes."[4]

Interprofessional health care teams are comprised of occupational therapists, physician assistants, physical therapists, and a variety of human movement specialists, and should include athletic trainers—working together to deliver comprehensive health care services to individuals and communities. Solving the health care challenges facing the United States will require professional silos to be broken down and clinicians to work together to the benefit of patients and clients. In order to become more relevant among the health care professions, athletic trainers must become players 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, and entrepreneurship. The variety of clinical settings in which our students gain experience should provide ample opportunities for IPP.

A number of challenges exist to widespread adoption of IPE and practice at the national, state, and local or institutional levels.[3] Challenges at the national level include lack of interprofessional accreditation standards, insufficient evalua-

tion of the effectiveness of IPE 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 athletic training students are educated at the undergraduate level, while the other health care professions' students are predominantly educated at the graduate level. Additionally, many entry-level ATPs exist in institutions where there are few if any linkages to the other health care professions. Athletic training 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 health care workforce.

The importance of IPE is gaining traction in athletic training. In June of 2012, the National Athletic Trainers' Association's (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 postprofessional 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.[5] The purpose of the white paper 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 [Commission on Accreditation on Athletic Training Education], 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, and provides a superb roadmap for advancing IPE in athletic training. It is a must read for all athletic training educators.

DIVERSITY AND INCLUSIVE EXCELLENCE

Diversity and inclusive excellence in athletic training is important both as a strategy to help diversify the health care workforce and to help reduce health disparities in our country. 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 2003 the NATA's web page reported that 87% of the certified membership was white, 1% black, 2% Hispanic, and 3% Asian or Pacific Islander. Comparatively, today's numbers are 81% white, 3.5% black, 4.2% Hispanic, and 3.5% Asian or Pacific Islander. Progress is being made in diversifying our profession, but that progress has been slow.

A diverse health care workforce is inextricably linked to solving the health disparities that exist between nonminority and minority populations in our country. The 2011 National Healthcare Quality and Disparities Reports[6] underscore the nature of the problem: health care quality and access are suboptimal for minority and low-income populations, and overall health care 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.[7] They include (1) racial and ethnic health care providers are more likely to serve minority and medically underserved communities, thereby increasing access to care; (2) racial and ethnic minority patients report greater levels of satisfaction with care provided by minority health care professionals; and (3) 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 nonminority and minority populations experiencing disproportionate burdens of disease, disability, and premature death.*[8]

There are many untapped opportunities for athletic trainers to join interprofessional 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 the 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. 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% of the US population, these 3 groups account for less than 9% of nurses, 6% of physicians, and only 5% of dentists.[9] 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."

The challenges faced in the athletic training profession are the same as the health care professions cited in the Sullivan Commission's report, and others to which athletic training is

more closely compared. To reiterate, the NATA reports that 81% of the membership is white, 3.5% black, 4.2% Hispanic, and 3.5% Asian or Pacific Islander. The diversity statistics for physical therapy, occupational therapy, and speech-language-pathology differ little from those of athletic training. The changing demographics of the US population make it increasingly likely that certified athletic trainers will encounter a diverse patient population regardless of clinical practice setting. Indeed, the National Collegiate Athletic Association[10] 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 ATPs. 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 also 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.[11]

Cultural competence mandates that each and every certified athletic trainer and athletic training student do everything possible to help diversify the athletic training profession. Diversity can be promoted within athletic training 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. Secondary school athletic trainers can have a meaningful impact on helping to further diversify the 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 health care professions to consider athletic training.

Another and perhaps more important dimension to diversity is the concept of inclusiveness. Inclusive excellence ensures a climate of equity and respect, where the rights of all are protected so that all members feel empowered, valued, and respected for their contributions to the mission of the unit. Athletic training can gain greater relevance among the health care 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 of this paper relates to the transition to a health care profession, athletic training's academic home within higher education, and the implications of the transition to graduate education as the entry point to the profession. This author's 2007 paper entitled "Athletic Training: From Physical Education to Allied Health"[12] expanded upon the seminal 1999 paper by Delforge and Behnke,[13] "The History and Evolution of Athletic Training Education in the United States." These papers are reminders that ATPs were originally spawned from departments of physical education, and as such a debt of gratitude is owed to the physical education profession for that opportunity. Since that time, ATPs have grown in sophistication as the body of knowledge required to practice as a certified athletic trainer has dramatically expanded.

In 1997, recommendations to reform athletic training education by the NATA Education Task Force included, "The NATA should encourage new athletic training education programs to consider aligning themselves in colleges of health-related professions."[14] Interestingly, although more ATPs can be found in units of the health-related professions, the majority remain within departments affiliated with kinesiology and/or the subdisciplines of human performance. This led to the recent statement from the Athletic Training Strategic Alliance related to the academic level for the professional degree in athletic training.[15] Currently the bachelor's degree in athletic training is the entry-level degree and requirement to sit for the Board of 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 health care profession. This is the degree that will be the entry-level degree and requirement to sit for the certification exam in the athletic training profession. The CAATE[16] recently provided the following update to standard 2:

> *CAATE accredited professional athletic training programs must result in the granting of a master's degree in athletic training. The program must be identified as an academic athletic training degree in institutional academic publications. The degree must appear on the official transcript similar to normal designations for other degrees at the institution.*

Furthermore, with regard to the timeline for this transition, the CAATE announced, "Baccalaureate programs may not admit, enroll, or matriculate students into the athletic training program after the start of the fall term 2022."

Several health care professions have created clinical doctorates, and there are 2 types. A professional clinical doctorate is an entry-level degree that qualifies one to sit for a qualifying examination. One example is the doctor of physical therapy (DPT). Other examples are the doctor of nursing practice and doctor of audiology (AUD). A postprofessional clinical doctoral degree is designed for students already credentialed in a health care profession. Several institutions have created or are contemplating creation of the doctorate of athletic training, and this is the athletic training profession's version of a postprofessional doctorate. Finally, there are the traditional academic doctoral degrees, such as the doctor of philosophy (PhD) and the doctor of education (EdD). These degrees are designed to prepare individuals to contribute to the body of knowledge in one's field through research and discovery. Currently 2093 of 42 849 members of the NATA

hold a doctoral degree: 848 the DPT, 753 a PhD, and the remainder another type of doctoral degree (NATA, written communication, February 11, 2015).

The process of deciding to make the transition to the professional master's degree occurred over several years. 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 certified athletic trainers prepared and submitted the report "Professional Education in Athletic Training: An Examination of the Professional Degree Level"[17] to the Board of Directors at the end of 2013. This document made 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 the current paper and athletic training's relevance within higher education and the health care professions. For example, the richness of the liberal education students receive at the undergraduate level should be enhanced when athletic training education occurs at the master's-degree level. Interprofessional education and practice opportunities for our students will be greater with other health care professions at the same degree level. And the migration of ATPs 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—may be accelerated.

To move to the requirement for a professional master's degree to sit for certification also creates a series of interesting questions for education in athletic training at the doctoral level. Will students who complete a professional master's degree want to complete a postprofessional master's degree? Or would they be more inclined to want a postprofessional clinical doctorate such as a doctor of athletic training degree? Other disciplines have created professional and/or postprofessional doctoral degrees, such as the DPT, OTD, AUD, and others. The experiences of physical therapy, occupational therapy, and audiology suggest these degrees have exacerbated the challenge of finding research-prepared PhDs in these fields. What would be the impact of a doctorate of athletic training on faculty recruitment and research in athletic training, and how would deans and department chairs view this degree? These and many other questions require further discussion during this exciting time to think about athletic training's role in higher education and the health care professions.

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