

BETTER STUDENTS, BETTER ATHLETES, BETTER COACHES: A MODEL FOR INCREASING PERFORMANCE BY INTEGRATING ACADEMICS AND ATHLETICS

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INTRODUCTION: University athletic and academic departments have the ability to operate independently from one another, but that does not mean that they are required to do so. Exercise science departments have a lot to offer an athletics department in the form of knowledge, expertise, research and student volunteers. Similarly, athletic departments can enhance sport and exercise science departments by providing the environment and opportunity for the application of theories and principles taught in exercise science courses. This paper will discuss the trials and triumphs of what this mutualistic relationship looks like in theory and in practice.

SCIENTIFIC BASIS FROM EDUCATIONAL THEORY: From Bloom's Taxonomy (1956) we recognize that critical thinking, problem solving, and learning are dependent on developing a foundational set of knowledge and skills at the remembering and understanding levels of the Taxonomy. Many may argue that undergraduate students rarely move beyond these lower levels of thinking. While those levels are important, students should be given authentic opportunities to apply, analyze, evaluate and create using the theories and principles taught in class if they are expected to be successful in future endeavors. Opportunities for learning at higher levels should be aligned to specific learning objectives and can be presented to students in the form of case studies, labs, and other practical experiences (Herrington and Herrington, 2006).



Figure 1. Bloom's revised Taxonomy (Adapted from Krathwohl 2002).

Specifically concerning exercise science, research has demonstrated that “inquiry-based” learning techniques may be more effective than the traditional instructor guided step-by-step methods (Nybo & May, 2015). The authors speculate that students begin to focus more on the assignments and less on the content being learned in the traditional methods. Furthermore, the autonomy and ownership of the students' experimental protocols associated with the inquiry-based method appears to provide extra motivation for learning (Nybo & May, 2015). Inquiry-based learning appears to yield more opportunity for students to attain practical problem solving skills, a quality that is important to the success of, but seemingly lacking, in interns and young coaches (Massey & Maneval, 2014, Stone, Stone, & Sands, 2004).

THE SEPARATED (TRADITIONAL) MODEL: When sport and academics are separated, kinesiology departments appear to be pushed more toward exercise science and away from sport science as a result of available research funding (Massey & Maneval, 2104, Stone, Stone & Sands, 2004). This could be problematic for coach education. Many athletes gravitate toward exercise science due to their sporting interest, but this may be lost if the connection between science and application within sport is not made (Stone, Stone & Sands, 2004). This could possibly lead to a focus on merely completing assignments and not on acquiring knowledge and skills related to the concepts (Nybo & May, 2015). The separated model also results in unused resources. Many exercise science departments possess faculty with expertise and equipment capable of providing many athletes and coaches valuable information that could lead to performance enhancement. Likewise, athletic departments can provide the environment for students to apply concepts learned. Research suggests that students develop a deeper and more meaningful understanding of content when it is applied in authentic scenarios (Herrington and Herrington, 2006).

APPLICATION: It is imperative that this relationship be mutualistic and not parasitic. Athletes are not projects and they are not there simply to become data for theses and dissertations. Similarly, student coaches are not simply ‘free labor.’ If one side benefits at the expense of the other, this parasitic relationship will not last. It is both possible and necessary for both sides to receive benefit in order for this partnership to work optimally.

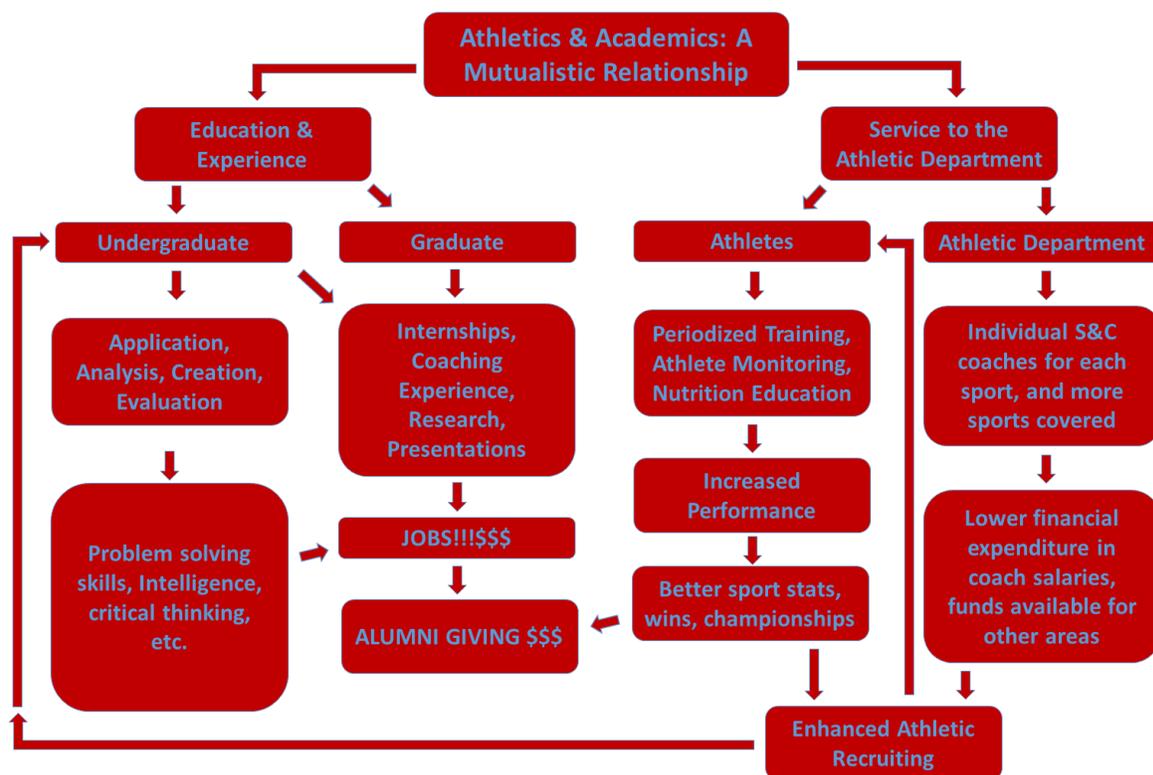


Figure 2. Mechanistic model demonstrating the integration between exercise science & athletics.

The relationship between academics and athletics proposed in this paper is described in the mechanistic model displayed in Figure 2. This model is written from the perspective that the students will be serving as strength and conditioning (S&C) coaches, but these students could

also serve as sport scientists or in many other areas in sport performance enhancement. The benefits of this relationship break down into two branches. On the academics side, the primary benefits are a better education and practical experience. Depending on the college or university, these benefits may be at the undergraduate level, graduate level, or both. Education is enhanced by increasing the opportunities for students to be subjected to the higher levels of thinking (applying, analyzing, evaluating, and creating) (Bloom, et al., 1956). Learning at these levels helps to build problem solving and critical thinking skills that are important for young coaches (Massey & Maneval, 2014). The opportunity for enhanced learning and skill building arises from the experiences while working with athletes. This relationship can also develop into internship, graduate assistantship, and research opportunities in S&C, sport coaching and sport science. All of which provide valuable experience that potential employers desire. Finally and intuitively, alumni with jobs are more likely to give back to their alma maters.

The benefits on the athletics side break down into branches for the athletes and the athletic department as a whole. Allowing students to work with sports can provide the services of an individual S&C coach for each sport. This may also provide the opportunity to cover all sports at the institution. This benefit may be particularly attractive for the athletic departments with smaller budgets as this could also save athletic departments money by allowing them to utilize a lower number of coaches in the areas where students can provide service. This could free up funds and personnel for use in other areas, enhancing the abilities of the department. To clarify, the authors are not advocating the removal of qualified coaches in favor of cheaper, less qualified ones. We are promoting the utilization of coaches and future coaches in ways that enhance performance of all parties involved. This may afford coaches the resources to provide more scientific preparation and development, which will hopefully result in enhanced performance on and off the field. As this all comes together, recruiting may also be enhanced. The recruits, or potential new student athletes, may eventually become new exercise and sport science students, and the cycle begins again.

While this model is quite flexible, NCAA regulations may necessitate the clarification of the role of these student coaches in order to be consistent with NCAA guidelines. For example, if graduate assistants are classified as sport coaches as opposed to students, contact with athletes may be limited. While these regulations are likely made with good intentions, they may limit utilization of student coaches at the expense of coaches' education.

CONCLUSION: There are likely more benefits and intrarelationships within the model presented in this paper, but it appears that university academics and athletics can and should work together in a way that benefits all. While the larger universities with larger athletic departments can succeed with the traditional separated model, it appears that the integrated model would be more effective for athletic and educational performance enhancement. This philosophy seems particularly true for the smaller or smaller budget colleges and universities.

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