More Weight on the Bar: Being a Strength and Conditioning Coach Today

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DURING RECENT DISCUSSIONS with individuals considering a career as a strength and conditioning coach, we were confronted with many questions about what it takes to enter the field and excel in it. The most common questions focused on education, certification, and experience. It was widely agreed that being a strength coach entails more than designing a conditioning program and supervising athletes in the weight room.

Although these roles have proved satisfactory in the past, great gains in the understanding of human performance have made it necessary for coaches to learn and do more than ever before. Strength coaches today are often required to have knowledge that cuts across several domains, especially in exercise physiology, sport psychology, biomechanics, and nutrition.

Correspondingly, then, it is important that anyone wishing to pursue a career as a strength and conditioning coach be knowledgeable about the skills and competencies required to obtain a position in the field.

The following educational credentials, certifications, and experiences will be required to obtain an entry position as a strength and conditioning professional and assist today’s practitioners in their efforts to keep pace with changes that are being ushered in with the 21st century.

Educational Background

The strength and conditioning professional will need a sufficient knowledge base. A bachelor’s degree in an exercise science field is the minimum requirement of the prospective strength coach. Employment in higher education often requires a masters degree in a related field.

The more educated an individual, the greater his or her chances of obtaining a position. Classes in exercise physiology, kinesiology, biomechanics, exercise and sport psychology, research and design, nutrition, athletic training, administration, and computer applications are suggested. The prospective strength coach must also have an understanding of concepts related to strength and conditioning, such as exercise technique, program design variables, weight room safety and design, and legal aspects of sport.

Professional Memberships and Certifications

There are many professional organizations, publications, and websites that provide up-to-date information on the exercise science field for the prospective strength and conditioning coach (see sidebar).

The National Strength and Conditioning Association (NSCA), formed in 1978, has become a worldwide authority on strength and conditioning for improved physical performance along with...
enhancing the careers of its members (4). The NSCA offers the certified strength and conditioning specialist (CSCS) credentials in order to "identify and recognize those professionals who possess the knowledge to design and implement safe and effective strength training and conditioning programs" (4).

NSCA certification is often a required credential of any coach responsible for designing and implementing an athlete's training program. It guarantees professionalism and credibility among all who hold the certification. To sit for the CSCS exam, an individual must have a BA/BS or be in his or her senior year at an accredited college or university. Individuals must also be CPR certified (4).

The NSCA (2) defines the head strength and conditioning coach as:

"a coach and administrator who is a Certified Strength and Conditioning Specialist (CSCS). This person organizes the strength and conditioning programs and the coaches assigned to individual sports. The head strength and conditioning coach is responsible for the overall program, facility, equipment, and staff, and for such administrative tasks as preparing a budget, purchasing equipment, preparing proposals, and dealing with the administration." (pp. 485, 487)

Because the CSCS may not only be a head strength and conditioning coach, an alternate definition has been created. The NSCA (3) defines Certified Strength and Conditioning Specialists as:

"professionals who apply scientific knowledge to train athletes for the primary goal of improving their athletic performance. They conduct sport-specific testing sessions, design and implement safe and effective strength training and conditioning programs, and provide guidance regarding nutrition and injury prevention. Recognizing that their area of expertise is separate and distinct, CSCSs consult with and refer athletes to other professionals when appropriate." (p. 64).

Another important professional organization is the American College of Sports Medicine (ACSM), which was created to educate individuals involved in exercise science and cardiovascular rehabilitation exercise programs (1). The ACSM offers several certification programs in two distinct categories: (a) clinical track and (b) health and fitness track.

ACSM certification is not necessary for a career as a strength and conditioning coach, but it may help one obtain a position.

USA Weightlifting (USAW) is another organization of significance to the strength and conditioning professional. As the national governing body for Olympic-style weightlifting in the U.S., it oversees 45 local weightlifting committees (LWC) which promote weightlifting programs and develop athletes in their region (6). Each LWC conducts coaching courses, athlete symposiums, and other programs about weightlifting.

The National Athletic Trainers Association (NATA) is to athletic trainers what the NSCA is to strength and conditioning coaches. Becoming a member of this organization would benefit those who wish to stay current on topics relating to injury prevention and rehabilitation. Although NATA certification is not required of the strength coach, the information provided with membership is valuable.

Research by Sutherland and Wiley (5) indicated that although most strength and conditioning coaches at the professional level had at least a bachelors degree (91%) in physical education or a field related to science, only 37% had a masters degree in a related field. The results of their survey also revealed that 53% were certified by the NSCA and 5% by the ACSM.

Also noted was that teams without an appointed head strength and conditioning coach relied on their team trainers or therapists 68% of the time, an assistant coach 16% of the time, and an outside consultant 11% of the time. While the research indicates that education and certification is a very important aspect of the prospective strength coach's vita, professional and applied experience is also necessary.
The Strength Coach's Checklist

Education
Bachelor's degree (or in progress) in exercise science or related discipline
Masters degree (or in progress) in exercise science or related discipline

Memberships
National Strength and Conditioning Association (NSCA)
American College of Sports Medicine (ACSM)
U.S. Weightlifting Federation (USAW)
National Athletic Trainers Association (NATA)

Certifications
Certified Strength and Conditioning Specialist (NSCA)
Certified Club Coach (USAW)
Certified Athletic Trainer (NATA)
CPR and First Aid

Professional and Personal Experience
Training experience through participation or athletics
Work experience at a health fitness center
Experience training/coaching athletes
Strength and conditioning coach:
- Assistant
- Student assistant
- Volunteer assistant
- Graduate assistant

Professional Skills
Olympic weightlifting instruction & demonstration
Weight training instruction & demonstration
Anaerobic, aerobic, & sport-specific conditioning
Concepts of periodization & program design variables
Performance testing & evaluation
Injury prevention, rehabilitation, & flexibility
Speed & agility development
Facility design & maintenance
Administrative experience
Risk management & legal aspects
Psychological aspects of sports performance
Psychological rehabilitation from athletic injuries

Personal Skills
Teaching skills
Ability to motivate others
Willing to work long hours
Strong interpersonal skills
Strong organizational skills
Knowledge of various sports
Dedication

Professional and Applied Experience

One of the most important things a strength coach can possess is experience. Some of the best learning takes place during actual hands-on training. Becoming involved in the creation, execution, and supervision of an athlete's conditioning program is essential to securing a career as a strength and conditioning coach.

Gaining entry to the field may require volunteering at a university weight room or taking an unpaid internship with an athletic team. Working with athletes and a competent strength and conditioning professional who is already established in the field can create many opportunities and make one more marketable as a strength and conditioning professional. Remember that volunteering some time may be the only way to gain the appropriate experience.

Applied experience is what most people are lacking when they enter the field. Most strength and conditioning coaches have participated in athletics or some type of weight training. The fact is that those who did not participate in athletics may be at a disadvantage compared to those who were involved in a strength and conditioning program. From a career-seeking perspective, however, gaining experience in a strength and conditioning program can help one get the necessary practical experience he or she is lacking in athletics.

When it comes to proper technique in weight training, or to program design variables, the strength coach must be able to demonstrate and apply knowledge in these areas. For this reason, those less experienced should enhance their techniques and knowledge through continuous hands-on experience and educational resources (e.g., NSCA journals and publications by Human Kinetics).

Videos pertaining to weight training and conditioning techniques can also be effective teaching and reference materials. Professional organizations generally provide listings of upcoming events; their conferences serve as excellent means of gaining practical experience, exchanging ideas, and establishing contacts.

Many leaders in the field give presentations at these gatherings, providing useful information that

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can prove essential to a strength coach’s advancement in the field. And there are typically hands-on sessions during which other professionals can offer constructive criticism.

Through attendance at seminars, workshops, conventions, and conferences, valuable contacts can be made with other strength and conditioning professionals. Networking with others who are already established in the field is a good way to learn about the profession. In addition to the exchange of ideas and valuable information related to the profession, these relationships can also lead to internships, assistantships, and job offers.

Strength and conditioning coaches can never be overqualified. They must possess a good range of knowledge including that specific to the sports of the athletes with whom they are working. They must realize that their careers require more than just the ability to demonstrate how to lift weights. In acquiring more knowledge, skill, and experience, strength and conditioning coaches will enhance their professional capabilities and their chances of obtaining an excellent position in this exciting and growing field.

Individuals wishing to pursue a career as a strength and conditioning professional need to take the appropriate steps. The Strength Coach’s Checklist (see previous page) can serve as a guide. Note that success in the field does not depend on the acquisition of every item listed, but obviously, the more the better.

Briefly, then, the strength and conditioning professional must have a lot of knowledge and expertise. When pursuing a career, one should take the most effective steps: appropriate education, membership in relevant organizations, holding valuable certifications, gaining practical experience, and staying current with the latest research.

II References


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