

A Model to Create Initial Experiential Learning Opportunities in Strength and Conditioning

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ABSTRACT

INTERNSHIPS ARE EXPERIENTIAL LEARNING OPPORTUNITIES, WHICH ARE CRITICAL TO DEVELOPMENT AND PREPARATION OF FUTURE PROFESSIONALS. THE INITIAL INTERNSHIP EXPERIENCE SHOULD SUPPORT AND ENHANCE THE ACADEMIC PROGRAM'S COURSEWORK THROUGH THE USE OF EVIDENCE-BASED PRACTICE, GUIDED MENTORING, AND STRUCTURED LEARNING. IT IS A TRIANGULAR RELATIONSHIP IN WHICH THE STUDENT-INTERN COACH, THE UNIVERSITY INTERN COORDINATOR, AND THE INTERNSHIP SITE SUPERVISOR PLAY AN IMPORTANT ROLE AND ARE VESTED IN ITS SUCCESS. THE PURPOSE OF THIS ARTICLE IS TO OFFER A PRACTICAL UNDERSTANDING AND DISCUSSION OF THE INTERNSHIP EXPERIENCE FOR THE NOVICE UNDERGRADUATE STUDENT FROM SITE SELECTION TO PROFESSIONAL DEVELOPMENT.

INTRODUCTION

Strength and conditioning professionals in conjunction with athletic trainers, physiotherapists, sport dietitians, sport scientists, etc.

are commonly part of a team that provides support services to athletes. The duties of strength and conditioning professionals consist of but are not limited to: athlete assessment, training program design and implementation, facility layout and maintenance, development of policies and procedures, budget management, and diligent record keeping in the form of database management (4,27). It takes time, experience, and practice to become a competent strength and conditioning practitioner who can successfully balance the art and science of the coaching profession (10). Satisfactory completion of academic coursework in the exercise sciences and the accumulation of practical knowledge in internship settings provide the foundation from which to begin to evolve into a successful practitioner (10).

The development of knowledge, skills, and abilities outside of the traditional classroom environment is commonly referred to as experiential learning and can take the form of internships, undergraduate research, a semester of study abroad, among other settings (15). Learning can be viewed as a holistic process that is best optimized through exposure to a variety of experiences and settings (15). Providing inexperienced students with the proper setting in which to apply content, which was learned in their academic

programs, is advantageous to skill set development and professional preparation (7,19). It also may provide an opportunity for students to gain a deeper understanding of the profession from a philosophical and social perspective.

The strength and conditioning field, with its primary focus being one of athletic development, is similar to the sport-coaching profession in placing expectations on practitioners to set and attain performance-oriented goals (12). Sport coaches, athletic health care professionals, and athletes often seek immediate results from such programs. Thus, the strength and conditioning internship as a student-intern coach (SIC) can provide a valuable experiential learning opportunity for the beginning practitioner (2,19) as well as the appropriate transition from novice SIC into a more advanced internship or an entry-level strength and conditioning professional position (17,22).

The mentoring of the SIC by experienced professionals (2), the appropriate setting for skills application (22), and guided self-reflection and assessment (23) by the SIC are integral to the internship experience (2,17). An

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effective internship model of experiential learning, which addresses the aforementioned, is a triangle in which each individual (i.e., SIC, internship site supervisor, university intern coordinator) has a role and contributes to creating a positive experiential learning setting. When cohesion is achieved, the experience can be beneficial for all parties (3). When there is a lack of effort from 1 individual, the other 2 may miss out on an opportunity for professional growth and development. Coaching education and professional development are lifelong processes (10,19,23), and improvements can always be made in how things are implemented for all parties involved (21). An established relationship of open communication and shared self-reflection among the internship site supervisor (ISS), SIC, and university internship coordinator (UIC) will benefit everyone's professional development.

From the point of view of the novice SIC, the initial strength and conditioning coaching internship may be both exciting and intimidating. The experience can be full of uncertainty and second-guessing on the part of the SIC. It is mixed with a desire to learn, to prove oneself, and to apply what has been learned from academic coursework. With this in mind, it is recommended that the SIC, in conjunction with the UIC, thoroughly consider a possible site, and find a comfortable but challenging fit. From the point of view of the UIC, the ideal experiential learning setting would complement what the SIC has learned in the university academic program, and foster the development of necessary knowledge, skills, and abilities (KSAs) using the model of evidence-based practice, which is the use of methods derived from and based on experimental evidence (25). From the point of view of the ISS, the internship program not only provides suitable opportunities to bridge the gap that exists between academic theory and actual application (7,22,23) but also affords opportunities for connections to be made that may enhance the SIC's future learning in the

academic setting (9) as well as prepare the SIC for advanced levels of experiential learning. Therefore, the purpose of this article is to (a) offer a practical understanding of the development of the technical expertise of the entry-level strength and conditioning coaching internship process from site selection to roles of involved parties to professional development and (b) describe the triangular model of the SIC, UIC, and ISS. The primary focus is a discussion of the initial internship experience for the undergraduate student with limited practical exposure.

INTERNSHIP SITE SELECTION

Depending on the academic institution's policy, the internship selection and placement process may be under the direction of the UIC or the majority of the process may be self-directed by the SIC (6,7,22). Selecting a site that does not meet the interests, goals, and level of technical expertise of the SIC may result in a subsequent lack of interest, low productivity, and poor performance (22). When asked to reflect on his recent coaching internship experience that was less than favorable, one SIC replied, "I would have picked working with a coach with a philosophy that was closer to the way I think" (6). Therefore, knowledge of the intern site, the personnel, required qualifications of the intern position, and the site's mission and goals would be beneficial and provide direction during the selection process.

While finding a paid internship might be a priority for the SIC, the level and type of experiential learning that will be provided by the internship site should also be considered in the decision-making process (15). The UIC can serve as a valuable resource in site location; therefore, it is recommended that students schedule an initial meeting with the UIC to discuss internship site placement and establish internship goals. Most UICs have the benefit of being familiar with the students in their respective academic programs and established connections with current strength and conditioning

practitioners. In addition, the UIC will be aware of the quality and level of instruction provided to SICs by an ISS (18), and the structure of a facility's internship program (17,22).

The following items are recommended to keep in mind when going through the internship site selection process. First, a good experiential learning site will complement the academic content that the student has learned (2,4). Entering an applied coaching environment can be daunting, especially if the inexperienced SIC has minimal background in the type of environment (18,19). Concepts that seem clear in the classroom setting may not be as well defined once the individuality of the athlete is taken into account. One example of this is the teaching progression of specific exercises. Depending on the athlete's previous resistance training experience and particular neuromuscular limitations, he may require remedial exercises before he can progress into the more commonly used procedure. An additional example of theory and application differing might be the determination of an athlete's exercise load selection based on percentages of the 1 repetition maximal (1RM) effort or predicted 1RM test (1). Methods will vary for obtaining and applying this information dependent on the athlete's training status and goals. Observing such situations and participating in the process can demonstrate to the novice SIC the situational application of scientific principles learned in the classroom from the model of evidence-based practice. In addition, these experiences can assist the SIC in learning to differentiate information and develop coaching pedagogical knowledge (11).

Second, it is recommended that the SIC has an awareness of what area of the strength and conditioning field he would like to pursue on graduation. Athletic development settings vary and may include: collegiate strength and conditioning, commercial athletic performance training, commercial performance-based fitness, community-based fitness and athletic strength and conditioning programs

(20), high school strength and conditioning, sports medicine clinic, or a specialized business. It is recommended that the type of setting be discussed in the initial meeting between the UIC and SIC. With interest comes motivation, if the SIC finds little appeal in the internship site, then there may be limited motivation to learn and to put in the required effort. SICs who pursue their specific goals and interests are in a position to gain the most from their experiential learning environment.

Third, the selection of a site with an ISS who enjoys and values the process of mentoring interns (2) will enhance the experience for the SIC. The UIC can be instrumental in providing guidance through this part of the selection process. Does the facility have an established coaching intern program (22)? What type and level of coaching intern education program is in place? Unfortunately, some ISSs view interns as unpaid labor and do not consider their own roles as mentors and educators (18) or they may be more comfortable working with SICs who are more experienced and require less direct oversight. Time to appropriately supervise inexperienced novice interns may be an issue for some strength and conditioning coaches who have a high athletes:coach ratio, which requires them to provide many hours of direct instruction (4). The goal of a strength and conditioning coaching internship is for the SIC to receive applied experience under the guidance of an established coach who serves as the ISS and a mentor to the SIC (17). If the ISS is a successful mentor, the SIC will benefit from and appreciate the professional experience gained.

STUDENT-INTERN COACH

To promote a smooth transition and alleviate confusion, the successful ISS will have developed clearly defined policies and procedures relative to appropriate attire, behavior, and general responsibilities before the SIC's first day of work (24). First impressions are important and difficult to change. Therefore, it is recommended that the

SIC has familiarized himself with the facility's policies and procedures and be on time and dressed appropriately from the first day of the internship. Tasks, such as cleaning, filing, and answering phones, should be viewed as part of the learning process and approached with the utmost professionalism. To gain the most from the experience, SICs should be willing to assist as needed and operate under the philosophy of: what can I do, starting now, to benefit the most from my time here? This may be difficult to answer in the first few days. Some ISSs do not permit novice SICs to advise on exercise technique and other exercise modifications (24). This is understandable early in the coaching internship because it takes time for SICs to learn what ISSs expect, how they cue, and the policies and procedures of the facility (17). Therefore, the SIC's goal is to listen, do what is asked, observe, and learn. It is important to express an interest in all activities, be actively engaged, and be willing to help with any tasks from the racking of weights to setting up equipment for agility drills.

Asking questions of the ISS when appropriate will facilitate the SIC's gaining responsibility, becoming more involved, and acquiring a variety of experience. Although the ISS may be the primary coach mentor, much can also be learned from other staff members. If it is feasible, then the SIC should make a point of interacting with other staff members, when appropriate, to broaden opportunities and enrich learning experiences.

Relationships will develop between the athletes and the SIC. Often athletes will view the SIC as another coach and will trust the SIC; therefore, it is essential that accurate information is provided. The safety of the athletes is always the primary responsibility of the SIC. The most effective SIC will establish an understanding and method of communication (16) with each athlete by learning names and being clear with instruction. The use of cues should be consistent with those

that were taught by the ISS during the observation process. Athletes will be familiar with these cues and will be more likely to respond appropriately. As the SIC becomes more comfortable, it is important to resist the temptation to become complacent and take shortcuts during less desirable tasks. The SIC should view learning from this initial internship experience as an ongoing process and continue to ask questions and focus on the athlete's needs.

INTERNSHIP SITE SUPERVISOR

The ISS plays an important role in the SIC's success. The SIC usually views the ISS as a mentor and relies heavily on him for instruction, advice, and assurance (16). To develop effective SICs, the ISS will need to spend sufficient time with an SIC in the early stages of the internship, be aware of the SIC's development, and provide guidance accordingly (22). The ISS will slowly increase the roles and responsibilities of the SIC, as he becomes more comfortable with the skills of the SIC (24). For example, after a set period of observation, the SIC may be permitted to supervise an athlete or small group of athletes through a warm-up, a cool-down, or stretching program. The effective ISS will monitor these activities and when the deemed appropriate, the SIC will be given more autonomy during coaching. An experienced ISS will have a predefined structured learning approach to the internship that may include a timeline of experiences, assessments, and outcomes that the SIC will complete (6,22). A sample timeline is presented in Table 1. Time spent on individual assignments can be adjusted to fit the required length and level of the internship. The experienced ISS will be able to facilitate the SICs learning through adjusting expectations and required tasks on an individual basis as the situation warrants (10).

The SIC will be expected to attend staff meetings and to perform assigned administrative and cleaning tasks throughout the course of the internship.

Table 1
Example of an internship program timeline

Weeks	Assignment	Related information
Pre, 1	Required readings and videos. Become familiar with facility's policies and procedures	Should be easily accessible and free of cost to the SIC
1	SIC coaching/practical experience evaluation; SIC performance evaluation	ISS creates specific internship training program based on SIC's goals and evaluation results
1	Shadow training sessions	SIC keeps a log of questions and comments
2	Begin internship training program	This activity promotes learning of ISS's training philosophy by the SIC
2	Attend weekly in-service meetings	Planned agendas that include discussions of topics related to the application of coaching theory and facility procedures
2	Move from shadowing toward limited coaching	Timing will vary dependent on SIC's knowledge, skill, and ability
3	Teach warm-up/cool down	SIC must first demonstrate competency of task to ISS
3, 4, and 5	Programming scenarios	SIC develops programs for specific situations developed by the ISS
3, 4, and 5	Mastery of specific exercises	SIC demonstrates proficiency to the ISS
4 and onward	Hands-on coaching during trial sessions	ISS observes the SIC and assigns responsibilities as is warranted

ISS = internship site supervisor; SIC = student-intern coach.

The ISS will progress the SIC at an appropriate rate into teaching technical lifts, supervision of small groups, blog postcontribution, more complex programming situations, and other projects. It is recommended that the ISS provides defined opportunities for the SIC to ask questions in addition to immediate, fair, and direct feedback on the SIC's job performance (6,22).

As Lave and Wenger (16) stated, "the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practice of a community." An effective ISS will seek to create a supportive learning environment with active participation by the SIC that will foster such a community of practice (15). The National Strength and Conditioning Association follows a plan of physical and cognitive skill development for interns, which consists of a mentoring process of modeling (e.g.,

observation), scaffolding (e.g., assisted instruction), and fading (e.g., independent instruction) (17). The basis of this begins with observation by the SIC, followed by ISS-supervised application of observed instruction, and then a gradual decrease of supervision. The coaching part of this model describes "the fundamental process of overseeing and directing the apprenticeship's learning experience" (17). This tactic is an optimal way to prepare and merge the novice SIC into employee-level responsibilities. Eventually, the SIC can move toward helping to cover the floor, resulting in a safer and more efficient facility. Moving forward, the SIC will feel more confident, proficient, and be invested in the facility's success (22).

As these aforementioned phases are implemented, it is recommended that the ISS considers the following:

- Develop an intern position description in which the duties and responsibilities of the position are clearly defined (8).
- Teach the SIC as if he were a new employee by gradually building responsibilities and roles as the understanding of operating procedures improves (22).
- Be clear and direct with instructions and provide consistent feedback. A common complaint among SICs is the lack of sufficient direction and evaluation regarding their performance. "I had absolutely no idea whether I was doing a good job or not. I would rather have had the supervisor tell me that I was doing everything wrong, than keep completely silent and not give any feedback at all (Intern; interview)" (5).
- Increase hands-on interactions as the SIC demonstrates mastery of tasks,

thereby building the developing coach's self-confidence. This progression should be dependent on the individual SIC's performance, keeping in mind that not all SICs will attain the same level of competence.

Holding an in-service meeting of the ISS, staff, and SIC can provide an opportunity to focus on important specifics to the policies and procedures of the facility. These can vary from coaching cues for movements, such as the squat or Olympic lifts, to exercise program modifications for an injured athlete. This is also an ideal time for group discussions of required readings from relevant literature. Deketelaere et al. (5) support the concept of individualized instruction between ISS and SIC: "...interns indicated that, in addition to the practical training, they would like to have periods of formal teaching in which to review or refresh more general background knowledge." Therefore, it is advisable for the ISS to schedule time with the SIC for the purpose of explaining concepts and reinforcing information obtained by observation and skill application (16).

Providing praise and assurance for the SIC when tasks are well executed will assist in creating a culture of support (15). Successfully making correct exercise modifications or helping an athlete to achieve a challenging skill is a benchmark of learning and accomplishment for the novice SIC. The acknowledgment of such positive occurrences by the ISS will provide a reference point for self-reflection and enhance the SIC's development as a coach. Likewise, the same process is effective when the SIC does not handle a situation satisfactorily. For example, the SIC may have felt hesitant and failed to correct a group of athletes performing a supplemental exercise incorrectly or he may have set up the equipment incorrectly for a specific exercise. Coming from a place of constructive criticism during a discussion of what failed to work and why followed by encouragement to try again will also facilitate the SIC's learning process. Group

discussion of the aforementioned in the realm of effective coaching will assist with facilitating a sense of belonging and can be a team-building activity (22).

UNIVERSITY INTERNSHIP COORDINATOR

Often internship experiences will occur under the university structure with a UIC serving as the liaison between the university and the internship site. It is his responsibility to ensure that all required paperwork (e.g., memorandum of understanding [MOU], affiliation agreement) is in place before the SIC begins the internship. Any evaluative measures, except performance evaluations, that are part of the internship course will be completed by the SIC and graded by the UIC. University academic program directors recognize the value of internships and many have deemed it necessary for students to complete a certain number of hours of experiential learning as part of the degree program. Yet, internship requirements vary considerably across universities and academic programs from no required experience to multiple internship courses, and the required hours can range from 100 to 500 in a semester (6,7,24). Some internship courses include regular class meetings as part of the course requirement (6). Such meetings under the direction of the UIC can lend themselves to effective peer teaching and problem-solving opportunities and are worthy of consideration for inclusion into the academic program of study.

Topics covered may include: coaching techniques, facility policies and procedures, instructional strategies, motivational techniques, personnel issues, interpersonal communication skills, and professional standards and guidelines. The peer teaching opportunities created from these class meetings can be times of growth and the SIC group interaction helps all to reflect on weaknesses and to devise ways to improve (24). The UIC who is able to guide SICs to solutions by providing relevant personal, professional experiences will develop a relationship of mutual

respect and appreciation in which the SICs value information being given to them (6). In addition, the UIC will find benefit from this experience through exposure to new techniques and remaining engaged with his instructional field. Topic selection and the extent of topic coverage can be adjusted to fit the internship course description and required course objectives. It is recommended that the UICs address a clearly defined list of KSAs in the internship course through lecture, laboratory, and/or field experiences. An example of biweekly class meetings for an introductory undergraduate level internship course is presented in Table 2. If university curriculums include intermediate and advanced level internship courses, then topics of class meetings can be progressed accordingly to complement the internship level.

While the majority of UICs are academics in the exercise or sport sciences (26), not as many will have experience as strength and conditioning practitioners (2,6). To teach and supervise practical abilities effectively, it is recommended that UICs seek experience and professional certification in the aforementioned area and pursue educational recognition status (NSCA-ERP) for the university academic program from the National Strength and Conditioning Association or an equivalent professional accrediting body (13,14).

As the internship nears completion, the UIC can provide in-class discussion opportunities that promote reflection on the whole internship experience. As mentioned by Ross and Beggs (24), "...professional growth through experience is accomplished by reflecting-in and reflecting-on practice dilemmas..." As SICs reflect and prepare to move on from their internships, they will have developed a better idea of their professional goals. At this point, a follow-up discussion on future internship opportunities, employment, and professional and graduate school options may be beneficial. The UIC can provide information on the best path(s) to assist the SICs in making an appropriate decision.

Table 2
Example of biweekly internship class meeting agenda

Week	Topic	Assignment
1	Course introduction; expectations and professionalism; develop internship goals	Internship forms, MOU, and internship work schedule
2	Professional certifications; graduate/professional schools; professional networking	Cover letter, resume, and intern job description; linked-in page
3	Instructional strategies: cueing and motivational techniques	Peer teaching
4	Policies and procedures: mission statement and goals; organizational structure; employee code of conduct	Organizational chart; behavior contract
5	Policies and procedures: facility design and maintenance; standards and guidelines	Facility floor plan; maintenance/repair plan. NSCA Professional Standards and Guidelines
6	Policies and procedures: accident report; emergency plan	Safety guidelines
7	Roundtable discussion	Self-reflection article

MOU = memorandum of understanding; NSCA = National Strength and Conditioning Association.

PROFESSIONAL DEVELOPMENT

Another important aspect of an internship is the opportunity it provides for SICs to begin to establish a professional reputation through making connections with established coaches. Such connections are useful to the formation of a professional network and may assist the SIC with finding additional internships, future employment, and creating a positive professional image. This is also an area in which the UIC may provide assistance by guiding the SIC through the job application process from locating positions of interest to writing an application letter and resume.

The value of professional development cannot be underestimated, and the UIC and ISS can emphasize the importance of lifelong learning to SICs. Some strength and conditioning practitioners may pursue postgraduate university-based coach education programs, whereas others may select less formal methods of continuing education, such as conferences, clinics, and workshops (10,11). Many will choose self-directed activities, such as networking (23), reading, mentoring and observing peers, and participation in discussion groups (10,11). The field of

strength and conditioning is constantly evolving; therefore, practitioners must seek to improve their knowledge and to broaden and refine their skill sets to remain competitive (4,10). Whatever the method used, it should be a consistent goal to improve the scientific and practical knowledge of coaching (2,8).

To reduce liability exposure and to demonstrate that they are qualified to provide a certain standard of care, it is recommended that strength and conditioning coaches have professional certifications (8,27). One of the most reputable and widely recognized is the National Strength and Conditioning Association's Certified Strength and Conditioning Specialist (NSCA-CSCS). There are additional certifications that are specific to other areas of the coaching profession. Both the ISS and UIC can advise SICs on what specific certifications would best aid their future career paths. Entering the profession with internship experience and a relevant certification in addition to the college degree will make the recent graduate more sought-after (4,9). However, many SICs report lacking professional certification as well as receiving little or no guidance relative to this from UICs or ISSs (6).

CONCLUSIONS

An initial internship in strength and conditioning coaching is an occasion to provide experiential learning and gain practical knowledge, which complement academic content. The triangular relationship of the UIC, SIC, and ISS can create a meaningful experiential learning opportunity that supports the academic program of study, if all 3 parties are vested in the model. An experienced UIC will bridge the academic content and the experiential learning thereby making the internship experience relevant to the SIC. The skilled ISS will embrace his role as a mentor and provide guidance to SICs while closely observing their progress and gradually affording them more responsibility. The successful SIC will realize the opportunities the internship provides and take advantage of the available learning resources to gain professional experience and to become sufficiently prepared to enter the marketplace or pursue a second more advanced internship.

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