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SPORT PERFORMANCE DIVISION

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**The Role of Deliberate Practice
in Becoming an Expert Coach:
Part 3 – Creating Optimal
Settings**

**The Assessment of Reach
Protocols Utilized in
Vertical Jump
Measurements: A Short
Discussion on Coach
Application**

Game on: How Game Dynamics
Can Create Lasting Buy-In and
Connection

A Glimpse at the New
International Sport Coaching
Framework



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Привет! Or in English, “hello”! Welcome back to the Olympic Coach.

As of today we are just under seven months out from the Opening Ceremony for the Olympic Winter Games in Sochi, Russia and as would be expected the winter sports are fully focused on the final preparations for the top athletes. It is at this time that you can really start to feel the energy build around Team USA and you can once again see the grit and determination of the athletes, their coaches and support staff. The laser focus of these athletes is always inspirational and reminds me just how lucky we are to work in Sport and around such motivated and talented people.

In this issue of Olympic Coach Magazine we are including the third installment of Gilbert and Trudel’s “The Role of Deliberate Practice in Becoming an Expert Coach: Creating Optimal Settings”. Follow through with us as we discuss deliberate practice as it relates to the development of coaching expertise and as we look for insights into the coaching expertise of legendary coach John Wooden, voted by numerous media outlets as the ‘Coach of the 20th Century.’

Another article to pay close attention to is “Game on: How Game Dynamics can Create Lasting Buy-in and Connection” by Blair Bloomston, VP of Game On Nation and one of the founding partners of Game On Nation, LLC. Game On Nation has trained many of the world’s top athletes, coaches, teams, and corporations, helping them to improve communication, leadership, character development, and media awareness.

On June 23rd the International Olympic Committee (IOC) along with the Olympic Movement celebrated its 65th Olympic Day! This year the event involved more than 4,000,000 participants worldwide with over 150 National Olympic Committees (NOCs) taking part. This annual celebration serves to remind us that we are involved in a very unique movement, and provides an opportunity for us to reflect on the Olympic values of “friendship, respect and excellence” and how these values apply to the work we do every day.

Please enjoy this issue of Olympic Coach and let us know if you have any questions or there is something you would like to see included in the future. Thank you and GO TEAM USA!!!

“Game on: How Game Dynamics Can Create Lasting Buy-In and Connection” **Blair Bloomston, VP, game on Nation – www.gameonnation.com**

Think back to your childhood and remember playing hide-and-seek. I double-dog dare you. Picture your younger self, huddled anxiously in an epic hiding place, counting to 100 as fast as you could or perhaps mischievously skipping a few numbers before searching for your friends. Remember racing back to base like an Olympic sprinter before getting caught and having to be “it”. Remember playing hide-and-seek and odds are you’re smiling right now, and your adrenaline may even be pumping as if you were hiding or seeking.

The amazing part about the games we played in childhood is that those memories stay with us as adults. It doesn’t matter if you remember where you were, who you were with, how many played, or even if you won or lost; it is about the feelings you experienced while playing. It might have been years or even decades since you last played; yet, remembering hide-and-seek can still bring a smile to your face. That is powerful.

Game dynamics (the forces that drive and motivate behavior in a game) are what fuel the amazing power of games to generate engagement and buy-in. The video game industry’s ability to capture a player’s attention for hours on end, to the tune of an estimated \$68 billion in revenue in 2012 is a prime example (“Video Game Industry” Wikipedia, 4 May 2013). You may have been impacted by game dynamics in your day-to-day life without being aware of its effects. Businesses and advertisers have been using game dynamics to build brand loyalty for years since the implementation of airline reward mile programs. Educators utilize these programs to motivate and inspire students, such as www.nobelprize.org that has an education section devoted to games based on the work of Nobel Laureates. Even savvy marketers are using game dynamics to sway our purchasing decisions, such as Subway’s famous punch card program for free “footlongs.” Although the science behind game dynamics is still emerging, the impact is undeniable. Perhaps the best example is noted from social media site Foursquare, that cited a 3400 percent increase in active members between 2010 and 2011 due to their incorporation of game dynamics in the form of points, badges and rewards for users who “checked in” using their application (LA Times Blog, LA Times, 24 January 2011).

From a coaching perspective, there’s a lot to be learned and gained from the way in which gaming is capturing the attention of our athletes and audiences throughout the world. During my nine years as a communication coach for game on Nation, I’ve seen the power of game dynamics first-hand. Our game-based curriculum has helped college teams, professional athletes, and Fortune 500 companies improve their communication, leadership, and teamwork. Across these diverse audiences, I have found that there are four game dynamics that are consistently effective: competition, humor, mystery, and empowerment. Incorporating these dynamics causes participants not only to care about what they are learning, but to remember and apply the lessons long after the session is over.

Our first game dynamic is Competition that drives our behavior on the most instinctual level. Evolutionary biologists explain competitive instincts enabled humans to walk upright millions of years ago. Today, most athletes are driven to be first in the rankings, and the stakes are raised when wins, scores, and athletic achievements are published for all to see. This traditional idea of competition absolutely works, but I am also interested in a new definition of competition: “Collective” Competition. Here, the goal is to push yourself and exceed your own personal best while working together with teammates to raise the bar for your entire group. Collective Competition is the product of adding a simple rule to the familiar competition equation: “I’ve got your back.”

Try playing our communication and decision-making game “Firing Line” to see the competition dynamic in action with your athletes.

Rules of the game for Firing Line:

Have five to seven of your athletes form a straight line facing the rest of the group. They are now contestants on “Firing Line” and you are the Host of the game. You will go down the line and point at each of your athletes (in random order) while they compete to quickly name an item from a given category. For example, the practice category is “Colors.” As you point to each athlete, they must say a type of color, such as “red,” “blue,” “turquoise,” or “magenta.” They only have three seconds to answer from the time you point to them and they must not repeat anything that has already been said. Once an answer has been repeated or three seconds have elapsed without a response, the participant is eliminated. Feel free to play a practice round before the official game begins. After each round, the Host will receive a new, appropriate category from the audience (i.e., U.S. presidents, cars, board games, items you put on a sandwich) and the players must answer when you point to them. If they make a mistake they are “out,” and the entire team will send them back to their seat with lots of applause and support. The last athlete standing is the winner. *Coaches note: The pressure rises quickly in Firing Line, so the host should encourage players to try to appear calm in the face of this challenge. We are looking for steady breathing, feet planted firmly on the ground, no crossed arms or negative body language, and possibly a grin or a gleam in their eye as the competition increases.

Why do we play “Firing Line?”

The ability to think quickly on your feet is a crucial skill to possess in any situation. In Firing Line, a participant has the opportunity to practice making decisions in a short period of time, information or the ability to weigh all the pros and cons. We often fear that split-second decision-making could result in disaster, but it often produces positive results – particularly when we trust our instincts. A bold choice might be discovered because the player was able to “get out of his or her own way” and react without constraint or fear of responding with the wrong answer.

Underlying Tie-Backs for “Firing Line”:

- We are not cartoons. There is no bubble above your head that says, “I only know the names of four U.S. presidents”. We give clear signals when we are uncomfortable. Try to sound and appear at ease, even when the pressure is on.

- Do not solely rely on “magenta.” Have options. Someone might have the same creative idea as you and say it first. Planning too far ahead will cause you to freeze up when something does not go according to plan. Prepare yourself, but be willing to adjust.
- Fall down gracefully. Maintaining a positive attitude and surrounding yourself with support can help keep your spirits high even when you do not “win” the round. It’s much easier to get up from a fall when you’ve surrounded yourself with people who have your back.

Our second game dynamic that motivates people is humor. The power of humor has been an exciting subject of scientific research, and the results are intriguing. In James Gorman’s article for the New York Times, *Scientists Hint At Why Laughter Feels So Good*, the author cites a study from Oxford University that finds: “The physical act of laughing trigger[s] an increase in endorphins, the brain chemicals known for their feel-good effect...And the findings fit well with a growing sense that laughter contributes to group bonding and may have been important in the evolution of highly social humans” (“Scientists Hint At Why Laughter Feels So Good.” New York Times. 13 September 2011). From a game on Nation perspective, we’ve seen the humor dynamic’s ability to connect people and develop trust. Incorporating laughter and camaraderie into practice and team meetings is one of the best ways to combat burn-out, and humor is also a healthy and productive way to counter stress. That said, humor is delicate and following the rule of “I’ve got your back” is vital to ensure that the team laughs with rather than at fellow members.

Our third game dynamic is mystery, that plays upon our innate curiosity and desire to gather clues, solve puzzles and embrace the unknown. *Firing Line* actually uses a tremendous mystery dynamic in addition to competition, since contestants are unaware of what the next category or answer will be. When you play with your athletes, you will notice mystery impacts the situation when athletes are on the edge of their seat and are eager to determine what their teammate is going to respond with next. You can incorporate mystery in the midst of a routine practice by asking your athletes to approach each half hour as though they must discover something new. Rather than just going through the motions, challenge them to take on a “what’s behind the door?” mindset, and to pay deeper attention to the task at hand, the environment, their teammates, and themselves. At the end, have your group to share what they have discovered. Our creative mind is the only tool we need to activate the mystery dynamic and to look at the same old situation through newly focused eyes.

Finally, our fourth game dynamic is empowerment, which releases endorphins (like the humor dynamic) and improves confidence in sport and life. At the most basic level, empowerment is tied to winning. Empowerment is the validation that comes from awards, ribbons and medals. However, it is also rooted in new experiences and expanding your comfort zone, as in the nervous 16-year old who doesn’t think they’ll have a good time at prom without a date, but goes anyway and has a total blast. The sense of “I pushed myself and got through it” is the kind of empowerment that occurs daily and builds muscle memory to prepare us for life’s next challenge.

As such, there is an even richer way to experience the empowerment dynamic. This occurs when our circle of friends, family, teammates and coaches note a moment of success. Athletes benefit tremendously when they hear constructive comments beyond “good job,” so encourage your team to be specific with their compliments. Building time into practice for this type of dialogue is vital due to the empowerment earned from authentic, peer-to-peer feedback that amplifies the initial accomplishment. It ties our experience of success not only to a trophy, but also to the people who supported us along the way. Often times the greatest effect of the empowerment dynamic is the way in which it serves as a reminder of our achievements through the kind, supportive words of friends.

Previously, I referenced the growth Foursquare achieved through their use of game dynamics. Recently Foursquare announced it would be removing most of its game elements – choosing to retain only the location service that allows users to locate nearby friends (Jacobs, Steven. “Can Foursquare Get Its Mojo Back by Embracing ‘Passive’ Check-Ins?”. *Street Fight: Inside the Business of Hyperlocal*. 25 January 2013. Web. 3 May 2013). What an amazing shift, from announcing 3400 percent growth to dismantling the game system that was its claim to fame. Yet, there is a reason. I neglected to mention earlier that there is a catch to making the impact last; you have to devote more on connecting to people than connecting to things. Online badges, virtual rewards, and the occasional “free car wash” offer appeal, but the motivation they provide is fleeting and doesn’t capture our interest over the long term. Connecting with people, on the other hand, drives us on a deep, instinctual level and creates lifelong engagement.

I highly recommend layering these game dynamics into an upcoming practice. If one samples “Firing Line,” it is evident that competition, humor, mystery, and empowerment are all in play, driving the tie-backs and creating a teambuilding experience that your athletes will care about and, thus, remember. Each of these dynamics works to motivate at an instinctual level, and their biggest success is in helping forge deeper connections with those in our immediate community. I challenge all of us to utilize this valuable coaching resource to build lasting connection and buy-in, and live the rule of “I’ve got your back.” Let us use game dynamics to motivate. I double-dog dare you.

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The Assessment of Reach Protocols Utilized in Vertical Jump Measurements: A Short Discussion on Coach Application

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Preparing an athlete to perform at their highest potential can be a formidable task for sport performance professionals. It is crucial to approach these tasks with as much concrete and sound training to ensure that the best practices available are being implemented. Quality control is also important so that these practices can be validated and to make sure that improvements are indeed being seen in the ability of each athlete to perform. As discussed by DeWeese, et al. in the Winter 2013 issue of the Olympic Coach Magazine, periodizing a plan for the athlete is widely regarded as the best way to not only construct the proper program design, but to also validate the program through an athlete-monitoring system; a point that had been neglected in previous definitions of periodization. The revised definition produced in the article stated, "...training can more effectively be measured and be made apparent through the execution of a comprehensive athlete-monitoring program and ongoing scientific study" (DeWeese, BH et al).

Of all the performance tests employed by performance professionals, the testing of the vertical jump may be the most widely used form of athlete-monitoring. The vertical jump (VJ) measurement is a valuable tool in athlete assessment and monitoring. Vertical jump is often used in the calculation of lower extremity muscular power (Harman EA, et al, Liebermann and Katz, Patterson and Patterson, Sayers, et al. 1999, Tricoli et al., 2005) and has been shown in previous research to be a reliable predictor of success in sports such as American football (McGee KJ, Burkett LN), soccer (Wisloff et al., 2004), and ice hockey (Behm DG, et al, McGee KJ, Burkett LN). Further, vertical jump height has shown significant correlation with maximal muscular strength and power (Bosco, Mogroni, and Luhtanen, 1983, Sheppard et al., 2008) and sprint speed (Cronin and Hansen, 2005, Maulder and Cronin, 2005). Other research has demonstrated vertical jump assessment to be valuable in determining the effects of training on athletic performance (Isaacs, 1998), as Borràs et al. (Borràs et al., 2011) suggest, jump height and lower extremity power are sensitive to specific changes in the training protocol. At the elite level of sport, small changes in performance are significant as the difference between gold medal performances and not reaching the podium in the Olympics have been shown to be $\leq 2\%$ (Mujika, 2009). Thus, any test employed to examine changes in performance must display a high level of accuracy and reliability. Several accepted methods exist for vertical jump assessment (Leard et al., 2007, Nuzzo et al., 2011). Some of these methods include video analysis, force plates, contact mats or jump and reach displacement instruments (Leard et al., 2007).

The assessment of vertical jump through jump and reach displacement is perhaps the most commonly performed method employed by sport performance practitioners in the practical setting. There are two critical areas of assessment for the jump and reach displacement testing protocol. First, the reach of the subject must be accurately determined. Secondly, the measurement of displacement must also be accurately determined. This requires the subtraction of the reach from the height of the highest point displaced during

the jump. This is a simple system of measurement relative to other performance tools, but with two measurements requiring assessment to produce an accurate reading, the chances of error increase. Thus, it is crucial to measure the reach before take-off properly, as this is the factor that can be controlled by the investigator.

The methods for measuring a subject's reach have not been entirely established and inconsistencies within literature exist. The subject must stand and reach as high as possible with either one or both hands, but in which manner and whether or not the feet are flat on the ground are still open to interpretation. Reliability is an important area that has been discussed in reference to the jump and reach displacement measurement systems. Studies have discussed the reliability of this type of test with mixed results. Intra-class correlation coefficients have varied from 0.87 to 1.00, showing high to very high levels of reliabilities in some of the literature indicating that use of the jump and reach displacement test could be very practical (Burr et al., 2007, Hoffman and Kang, 2002, Nuzzo, Anning & Sharfenberg, 2011). However, these same studies have shown to be contradictory in some cases. In a study by Nuzzo (2011), in which a jump and reach displacement device was determined to be reliable, the measurement tool was seen to be the least reliable of the three devices tested within the study. Also, the jump and reach displacement device had tendencies for higher fluctuations in jump measurements with better jumpers, indicating that in higher level athletes the reliability may be worse than in lower level caliber subjects. Since these contradictions within the literature exist, demonstrating that professionals within the same field do not perform tests congruently, the standardization of what can be controlled should be investigated. Of the two key components of the jump and reach displacement protocols, it is the assessment of reach that a practitioner can maintain full control. It is important to discuss and compare the impact that different methods of reach assessments have on the reach of an individual prior to performing a jump test, as the reach is a main determinant of the resultant jump height.

The Impact of the Reach

With inconsistencies in the literature and amongst sport performance practitioners, it is worth knowing how much multiple protocols, that supposedly determine the same thing, actually differ from each other. At times, it is just as valuable to perform a comparative exercise in order to experience what the contrasting literature is attempting to relay to the professionals in the area. This hands-on and first-hand experience by the professional and practitioner can corroborate what is being established. For this reason, an unpublished, small scale, comparative study was conducted to establish a set of data to determine making decisions about testing protocol and analysis regarding carrying out vertical jump performance tests. The study was also performed to determine the differences that may exist between reach measurement approaches for the jump and reach displacement test.

Methods

The investigators utilized the Vertec (Vertec, Sports Imports; Hilliard, OH) for this current study. The Vertec is a jump and reach tool for assessing VJ and has been widely used in the assessment of VJ for monitoring performance testing of athletes. The Vertec is widely used because of the practicality to the user, as it is less expensive and easy to use. Three methods of reach measurement were evaluated. These methods include: flat-footed one-handed reach, plantar flexed one-handed reach and supine plantar flexed one-handed reach.

Subjects

A total of 14 (seven male, seven female) resident athletes at the United States Olympic Committee's Olympic Training Center in Lake Placid, NY were recruited. Average height of the group was 174.2 ± 6.33 cm with an average age of 24.57 ± 4.4 years. Performance requirements were not necessary since the exercise was not to test performance, but simply the differences in reach methods.

Procedures

Reach height was determined for all subjects in all methods assessed in the study. All methods required that the subjects wear tennis shoes and reach with their right hand. For the flat-footed one-handed reach method, each subject was required to stand with both feet together flat on the floor. This meant that no part of their foot could be off the floor while the reach was being measured as this could potentially change the readings. In this method, the subject's arm was pulled up as high as it could go (with both feet staying flat) with the measurement made from the floor to the tip of the finger of the outreached arm. For the plantar flexed one-handed reach method, the subject was required to stand on their "tip-toes," as plantar flexed as possible, while reaching as high as possible with one hand. The arm was pulled up as high as possible. The measurement was read from the floor to the tip of the finger of the outstretched arm. For the last reach method, supine plantar flexed and one-handed reach, the subject was required to lie down on their back while plantar flexing as much as possible and reaching with one hand as high above their head as possible. The arm was pulled up as high as it could go while the measurement was read from the tip of the plantar flexed foot to the tip of the finger of the outstretched arm. All of the measurements were recorded three times and averages of the three measurements taken for all the subjects.

Statistical Analysis

To determine whether there were significant differences between the three different methods of assessing reach, three separate two-tailed t-Tests for means were performed (one for each combination of reach methods). Statistical significance was set at a value of $p \leq 0.05$.

Results

The averages of the reach for each of the three reach methods were 227.57 ± 8.22 cm for the flat-footed method, 235.31 ± 8.65 cm for the plantar-flexed method and 242.10 ± 9.31 cm for the lying down, plantar-flexed method of reach assessment. All three methods of reach measurements were significantly different ($p \leq 0.01$) using a two-tailed t-Test for means (Seen in Table 1). The flat-footed method assessed the subjects' reach to be the lowest, with the lying down method being the highest measures for reach.

Table 1 - t-Test: Paired Two Sample for Means

Paired Methods	Means	P(T<=t) two-tail
Average Plantarflex Reach (cm)/ Average Flat Footed (cm)	235.31/ 227.57	8.95169E-12*
Average Plantarflex Reach (cm)/ Average Lying Reach (cm)	235.31/ 242.10	1.92568E-11
Average Flat Footed (cm)/ Average Lying Reach (cm)	227.57/ 242.10	2.47953E-13*

*Indicates Significance

Discussion

Inconsistencies in the data pertaining to the assessment of reach height is a proposed explanation for the lack of reliability in using the jump and reach displacement device to assess vertical power. When using this protocol, if reach height is not accurately assessed prior to a maximum jump attempt, jump heights will be erroneously overestimated. Such overestimation of jump and reach displacement heights when compared to various other jump displacement methods such as video analysis, switch mats, jump mats and force plates, are observed quite frequently in the research (Burr et al. 2007, Caruso et al. 2010, Ferrereira et al. 2010). A commonly observed method of reach assessment is the one-handed, flat-footed protocol (Burr et al. 2007, Caruso et al. 2010, Ferrereira et al. 2010, Rubley et al. 2011).

In recent years, studies comparing jump heights between a jump and reach displacement device and a force plate that analyzed flight time indicated that force plate readings were more closely related to plantar flexed reach protocols rather than flat footed methods (Burr et al. 2007, Caruso et al. 2010, Ferrereira et al. 2010). Ferrereira et al. 2010 stated, "If one method of reach height determination seems to yield more closely related to the force plate methods, then this should be preferred for use in future studies." Results of this study indicated the one-hand reach with plantar flexion most closely matched the jump heights given through flight times of the force plate when compared with one-handed flat footed. Because the reach was lower, thus calculating a larger displacement in jump, the flat footed method overestimated jump height by approximately 12.8 cm, compared to only approximately 4 cm for the plantar flexed method.

It is quite clear that the lack of plantar flexion during vertical reach assessment alone is enough to cause inflation in jump heights. The authors mentioned that forces generated from a force platform continue to register force output even while the foot is in plantar flexion, thereby indicating the need to include plantar flexion in reach assessment. Seen in our small-scale analysis alone, the difference between a flat-footed to plantar flexed foot in reach assessment differed by as much as approximately 14.6 cm and approximately 7.8 cm on the small end, with flat footed providing the lowest reach values. This would cause an overestimation in jump displacement for the flat-footed reach method for the same reason as mentioned earlier because a lower reach measurement calculates to a larger displacement in jump height, thus overestimating the jump relative to higher reach assessment methods. These are both very dramatic and significant differences and mean quite a bit when evaluating the potential performance capabilities of an athlete. The previous studies

revealed the plantar flexed method had the lowest jump displacements of all protocols except for the force plate. With our plantar flexed data showing the same result, along with the assumption that the force plate may show the lowest displacements, this is continued support for a plantar flexed method for reach assessment as a superior method.

Also mentioned in the study by Ferrereira et. al. 2010 as a possible cause of jump height overestimation was the difference in shoulder heights when comparing two-handed and one-handed reaches. If the subject utilized the two-handed method, the lateral tilt of the thoracic area and the raise of the shoulder of the extended arm were both eliminated; both of these actions occur mid-air during a maximum jump. This resulting lack of rotation decreases the reach, thereby increasing the overestimation of jump height. This was an area that was not covered in the small study performed in this article, as the two-handed method was not tested, but was a method for professionals to take into account as another opportunity that could result in the inconsistencies that exist.

A last concern revealed in the literature was the tilt of the pelvis when in full extension and reach at the peak of a vertical jump attempt. Studies have emphasized that if the participant is standing, there is an unlikely chance that a dramatic tilt of the pelvis can occur without lifting one of the feet off the ground during measurement. This is a concern because during the flight period of the jump, the athlete may utilize this method of laterally tilting the pelvis to achieve a higher reach on the side of the extended arm (Burr et al. 2007). The study in this article did account for this by utilizing not only the standing plantar flexed method, but also a supine plantar flexed method, that allowed for these actions to happen. It appears this study would agree with the notion that the lack of possible pelvic tilting while flat-footed may cause the overestimated reach of the flat-footed method relative to the supine plantar flexed method.

Practical Applications

The jump and reach displacement protocol as a performance test in sport will continue to be one of the more popular methods in assessing performance capabilities in athletes because of its ease in use, accessibility to professionals and cost efficiency. Previous research has made it apparent that when plantar flexion is not accounted for, maximum heights will be higher and likely overestimated in jump attempts utilizing the jump and reach displacement protocol. To address the problem, it is important as a performance professional to take into account all factors for this overestimation. A supine, fully plantar flexed, one-handed reach as the new standard for assessing jump heights appears to be a much more applicable method of assessment as it accounts for the concerns addressed in this article. This lying position will allow for further extension of the extended arm due to the fact the pelvis has the freedom to rotate laterally, which further allows the contra-lateral foot of the extended arm to drop lower than the other foot. These changes are very similar to what occurs during mid-air extension. The supine position also alleviates the problem of losing balance while reaching with plantar-flexion and a fully extended arm from a standing position. This method of reach assessment will allow for not only a much more comparable assessment to other high level, technologically advanced tools (i.e., force plates) that may not be accessible to most professionals, but will also help to standardize a widely used test for assessing an individual's potential ability to perform as an athlete.

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The Role of Deliberate Practice in Becoming an Expert Coach: Part 3 – Creating Optimal Settings

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One of the top news stories during the 2013 collegiate basketball championships was the vicious behavior of Rutgers men's basketball coach Mike Rice, which ultimately led to his firing and the subsequent firing of the Rutgers' athletics director. The video of Mike Rice physically and verbally abusing his student-athletes is both disturbing and extremely saddening; clearly inconsistent with the definitions of an effective coach we discussed in our lead article in this 3-part series on developing coaching expertise (Gilbert & Trudel, 2012). We remind readers about the Mike Rice example because it highlights the topic we address in this third article – creating the right environment for nurturing coach development through deliberate practice. Evidently, the athletic administration at Rutgers was made aware of Mike Rice's behavior on numerous occasions, including a review of the infamous video. Yet, coach Rice was allowed to continue in his position. It is interesting to note that after initially watching the video, the athletic director elected to provide coach Rice with a chance for "rehabilitation," requiring him to attend anger management classes. We wonder if the final outcome of the Rutgers basketball case would have been different if coach Rice developed his skills in an environment that provided coaches with resources to help them regularly engage in the type of reflective practice and critical reflection we discussed in our second article in this series (Gilbert & Trudel, 2013); exercises designed to challenge coaches to critically examine their assumptions (mental models) about effective coaching strategies (Knowles, Gilbourne, Borrie, & Nevill, 2001).

In the latest development from the Rutgers case, the university announced it will conduct a comprehensive review of practice videotapes across all 22 sports in their athletics program (CBS Interactive, 2013). Rather than scrutinizing the practices of coaches as a knee-jerk reaction to a scandal, would it not be more effective for the long-term success of programs to work collaboratively with coaches with regular meetings to reflect on coaching practices and help coaches learn to engage in critical reflection? The Rutgers case will prove to be very costly to the university, the coach and the athletic director, not to mention the long-term negative impacts on student-athletes' development (New Jersey Online LLC, 2013). One can imagine, at considerably less cost, an athletics setting that invests in a professionally trained coach development facilitator who helps design and manage a coach's community of practice (Gilbert, Gallimore, & Trudel, 2009) and also serves as a personal coach for guiding coach critical reflection (Gould, Carson, & Blanton, 2013; Trudel, 2012). Athletics directors, or directors of coaching, are well equipped to play this important role, but likely will require some additional training in creating optimal coach development settings (Trudel & Gilbert, 2004).

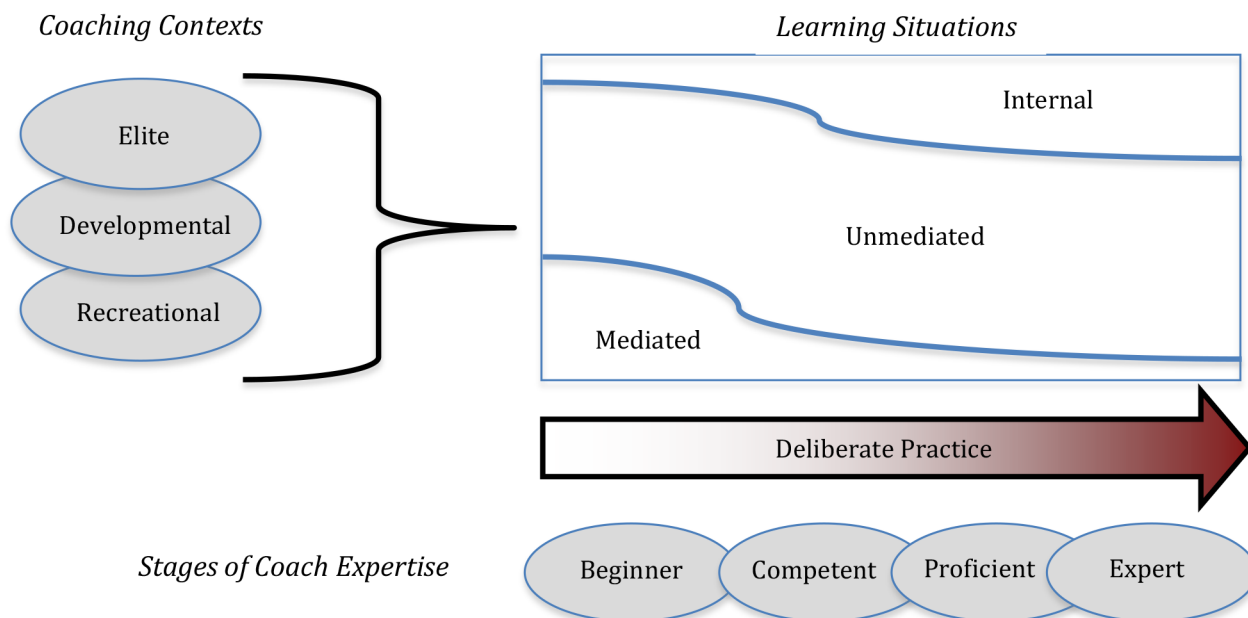
In our previous article (Gilbert & Trudel, 2013) we focused on the primary deliberate practice task for sport coaches: reflection. We differentiated between reflective practice and critical reflection. Reflective practice (Schön, 1983) is what many coaches regularly perform in varying degrees based on personal and environmental conditions (Gilbert & Trudel, 2005). Using reflective practice, coaches will typically step back after an event to evaluate what happened and will determine how best to proceed. Reviewing videos, statistics and discussions with assistant coaches are common examples of reflective practice.

On the other hand, critical reflection is a kind of deeper level of reflection that requires coaches to question their thought-process, which often results in what is referred to as “self-induced periodic confusion” (Hickson, 2011). We provided suggestions in our second article to help coaches more formally integrate reflection into their coaching. However, developing the habit of reflection can be a daunting task. Therefore, a supportive environment is crucial in stimulating and nurturing coach reflection – critical reflection in particular (Cassidy, Potrac, & McKenzie, 2006; Lyle, 2002). In this article, we first discuss the relative contribution of three learning situations (mediated, unmediated, and internal) in the different stages of coaching expertise (beginner, competent, proficient and expert) as well as the importance of deliberate practice. We will then explore what coach development administrators (CDAs) in different coaching contexts (recreational, development and elite) can do to support an optimal learning environment for coaches and athletes. Figure 1 is provided as a tool to graphically illustrate the contributions of different learning situations and deliberate practice across different coaching contexts and stages of coaching expertise.

How Coaches Learn to Coach: The Contribution of Different Learning Situations

Studies in which coaches were questioned about how they learn to coach suggest that it is through participating in many different learning situations. Although participating in a formal coach education program is usually the only way to receive a certificate, coaches indicate that most of their learning comes from books or videos, exploring Internet-based resources interacting with others, including mentors and the observation of other coaches (Cushion & Nelson, 2013). It is also clear that experience as an athlete directly influences the way in which coaches approach their craft (Chesterfield, Potrac, & Jones, 2010; Young, 2013). Recent studies indicate that both primary socialization (family) and secondary socialization (school, sport) strongly influence one’s coaching philosophy (Callary, Werthner, & Trudel, 2011; Nash & Sproule, 2009). Generally, coaches attribute most of their learning to personal experience. Accepting that each coach’s developmental path is shaped by their unique set of personal experiences – sometimes referred to as a personal biography – reinforces that there is no “one best way” to develop coaching expertise (Gilbert, Côté, & Mallett, 2006; Mallett, Rynne, & Dickens, 2013; Werthner & Trudel, 2009). Despite the idiosyncratic nature of developing coaching expertise, we believe common principles exist for creating environments for supporting coach deliberate practice and the development of coaching expertise. Our position is grounded in the literature on (a) how coaches learn to coach and the relative importance of three types of learning situations (Trudel, Culver, & Werthner, 2013; Trudel, Gilbert, & Werthner, 2010; Werthner & Trudel, 2009), and (b) deliberate practice and stages of coach expertise development – beginner, competent, proficient, and expert (Schempp, McCullick, & Mason, 2006).

The beginner coach stage typically corresponds to the first few years of coaching in a specific coaching context (i.e., recreational, developmental, elite). Each time coaches enter a new coaching context, there will be a period of socialization where they will have to learn the dominant language, values and norms of that particular setting (Feiman-Nemser, 2010). Contrary to many other professionals (i.e., physicians, lawyers, teachers), most coaches start coaching and then seek out formal coach education. Participating in formal coach education while simultaneously working and coaching presents time challenges and, as a result, most formal coach education is delivered in a condensed format (i.e., a weekend clinic). This kind of mediated learning situation has often been criticized for its lack of relevance to real-world coaching practices (Cushion, Armour, & Jones, 2003).



Mediated learning situations

Learning situations where coaches do not select the material to be learned. In other words, the learning context is controlled by other people; an expert or group of experts chooses the material of teaching, the delivery format, and when and where the learning activity takes place (e.g., coach education training program; workshops, seminars, etc.).

Unmediated learning situations

Learning situations where coaches decide by themselves what information they need and the different sources to be consulted (e.g., colleagues, books, websites, etc.).

Internal learning situations

In these learning situations there is no new material of learning coming from either a mediated or unmediated learning situation. Instead the individual reorganizes what he/she already knows, sometimes referred to as 'cognitive housekeeping'. Examples of situations where people can 'stop and think' are writing in a journal or working with a personal coach.

Deliberate practice

Practice that focuses on tasks beyond your current level of competence and comfort.

- Figure 1. Contribution of learning situations and deliberate practice in developing coaching expertise

We recently suggested that by taking a coach-learner perspective as opposed to an instructional perspective, some changes could easily be made that could improve these types of condensed coach education programs (Trudel et al., 2013). Further, beginner coaches might be considered “dependent learners” (Covey, 2004). Because beginner coaches are in a dependent phase marked by the need (often mandated) to acquire new information, it is not likely that coaches will be reorganizing their knowledge (internal learning situation) at this stage of development. When they do begin to reorganize their knowledge, they are entering the next stage of coach expertise development.

The second stage of coach expertise development is the competent coach. Competent coaches may occasionally participate in mediated learning situations, such as seminars or workshops, particularly if they need to accumulate professional development credits to preserve their certifications. Some coaches in this stage of development might take the time to “stop and think,” but this seems to be rare and not done systematically (Knowles, Borrie, & Telfer, 2005). Coaches in the competent stage of development will reflect on their coaching practice (games and practices) to identify gaps and make adjustments. Because coaches in this stage are becoming more independent, they are more likely to decide on their own what is important to learn and from whom (unmediated learning situations). Unfortunately, some coaches may push their independency too far and intentionally use strategies to avoid sharing what they believe is the best way to train athletes. Coaches in this stage maintain the mindset that other coaches are viewed as rivals instead of colleagues (Lemyre, Trudel, & Durand-Bush, 2007; Trudel & Gilbert, 2004). To move forward in the journey to becoming an expert coach, competent coaches need to devote more time coaching and shift from an independent mindset to an interdependent mindset: “If I am intellectually interdependent, I realize that I need the best thinking of other people to join with my own” (Covey, 2004, p. 51).

The third and fourth stages of coach expertise development are the proficient coach and the expert coach. If we look in the dictionary, the difference between the two are not particularly evident. Proficient means a person “well-advanced or competent in any art, science, or subject; skilled,” while expert stands for a person “who has special skill or knowledge in some particular field; specialist” (dictionary.com). In fact, these two stages are similar in many aspects. First, coaches in these two stages are very knowledgeable and are more likely to mentor beginner and competent coaches than take courses to develop their coaching techniques, although they will not hesitate to do so if they think they can learn even a small thing that could make a big difference in athlete performance (Werthner & Trudel, 2009). Additionally, they share the conviction that there is not “one best way” to develop athletes. As a result, they will not hesitate to exchange knowledge with other coaches, and their thirst for knowledge will lead them to investigate literature outside of sport (Werthner & Trudel, 2009). Finally, proficient and expert coaches spend more time performing “cognitive housekeeping” as some coaches recognize the importance of utilizing a reflective journal (internal learning situations) (Werthner & Trudel, 2009). Their thought process at the reflective practice level enables them to remain focused on day-to-day tasks, but it is their critical reflection that allows them see the big picture, shift perspectives, and identify new ways of thinking:

The practices of reflection are not just about fixing what is wrong and working out a way to get shot of our problems. Reflective practices can and should be about nurturing, extending and developing strengths and what is best. They should be about amplifying creativity, courage, perseverance, determination, kindness and fairness, for example. (Ghaye, 2011, p. 190)

Considering that proficient and expert coaches seem to share the same coaching practice and learning situations, what then makes the two groups different? The answer is deliberate practice. As discussed in the first article of this series (Gilbert & Trudel, 2012), the three key principles of deliberate practice are: a clearly defined task at the appropriate level of challenge for the specific learner, provision of unambiguous feedback, and opportunities to repeat to allow for error correction and subtle refinements. For Ericsson, Prietula, and Cokely (2007): “Genuine experts not only practice deliberately but also think deliberately” (p. 118). Essentially, expert coaches will more readily recognize that to develop as a coach, they have to adopt a conscious learning approach. Rather than waiting for learning situations (mediated, unmediated, internal) to occur spontaneously, these coaches will actively seek or create such situations (Werthner & Trudel, 2009). They will deliberately (a) set learning goals at the beginning of any learning opportunity, (b) use a deep learning approach by being open to modify what they already know and/or their way of doing things, (c) ask for feedback, and (d) persevere if a new approach takes some time to be successfully implemented. Legendary expert coach John Wooden was notorious for engaging in this type of deliberate practice across his entire career (Nater & Gallimore, 2010). In brief, expert coaches will not hesitate to step outside of their comfort zone to explore alternative ways of thinking about their coaching practice and the coaching culture in which it is embedded.

How Coach Development Administrators can Facilitate Coach Expertise Development

Knowles et al. (2005), after analyzing six coaching education programs, concluded, “When taken as a whole, the programmes that were assessed did not provide clear structures for the development of reflective skills alongside the delivery of sport specific technical knowledge” (p. 1719). The people who are in positions to either design, deliver or select coach education programming – referred to collectively as coach development administrators (CDAs) – should be encouraged to broaden their role in the coach development process (Trudel et al., 2013; Trudel et al., 2010). First and foremost, it is important that CDAs consider the different coaching contexts in which coaches work. We have decided to use the most common coaching practice classification for North American sport: recreational, developmental and elite. We would like to draw attention to the fact that elite coaches are not synonymous with expert coaches (Lemyre et al., 2007) and that expert coaches can be found in all three of the coaching contexts (Côté & Gilbert, 2009; Ford, Coughlan, & Williams, 2009). For more details about each of these three contexts and the typical profile of coaches in each of these contexts, readers are referred to one of our previous papers (Trudel & Gilbert, 2006).

The majority of sport coaches coach in the recreational context. Coaches in this context are often volunteers, and their experiences prior to coaching can vary. For example, parents with no experience in sport, but who have accepted a coaching position under the pressure of “if no one volunteers to coach there will be no team,” can end up coaching alongside other parents with many years of experience as an athlete or a coach (Capstick, 2013). As beginner coaches, they may participate in two types of coach education programs: a large-scale coach education program mandated by national or local sport associations (i.e., Coaching Association of Canada, California Interscholastic Federation) or a few hours of optional training organized by the local sport association. In both cases, the CDAs will focus their efforts on providing the beginner coaches with minimal, but essential knowledge to teach basic sport skills and create a safe and enjoyable experience for sport participants. For beginner coaches, their first years can be extremely challenging (Lemyre & Trudel, 2004). Therefore, CDAs should use new technologies to maintain contact with this large group of coaches. For example, sport organization websites should not only highlight the

achievements of elite teams, but resources (i.e., practice activities, discussion forums, etc.) should also be provided to assist coaches even if their role is limited. Because of the high attrition rate in recreational sport contexts, there are few coaches at the proficient and expert stages in recreational sport. This is unfortunate, as it could be argued that young athletes in recreational sport contexts have the greatest need for proficient and expert coaches to develop the proper foundation for continued participation and advancement in sport (Huber, 2013).

Most of the coaches in the developmental context have experiences as an athlete and many coaches will also have a few years of coaching experience. In this context, coaches may be volunteers or paid (often part-time), depending on the sport's culture. Their status as a beginner coach will be short and during that time they will likely enroll in a coach education program to obtain a certification requested by CDAs. Considering the bulk of their learning is rooted in unmediated learning situations, it has been suggested that CDAs should facilitate the implementation of coach learning communities: "We believe that large-scale coach education programs (i.e., certification programs) together, with local professional learning communities, have the potential to significantly improve coach development" (Gilbert et al., 2009, p. 3). Typical coach learning communities will regroup seven to ten coaches from a sport-specific context (i.e., high school volleyball) who will participate in regular development meetings guided by a facilitator. Through discussions on their ongoing coaching practice, coaches will not only share their knowledge, but will also create knowledge as they work together to accomplish shared goals (Bertram & Gilbert, 2011). In addition to helping coaches reflect on their own practice and facilitate critical reflection, research has shown that this approach presents the added benefit of increasing coaches' confidence (Cassidy et al., 2006). Although not clearly mentioned in the literature, it appears that coaches in the developmental context who have more years of experience and reflective skills will be considered proficient and perhaps expert coaches – acting as mentors or technical directors.

Coaches in the elite context are more likely to be employed full-time and with a portfolio of multiple years of experience as a competitive athlete followed by years as coaches and assistant coach. The beginner coach stage is often short, except for elite athletes who suddenly land a head coach position (Hesse & Lavalley, 2010). This will require guidance to advance beyond their technical knowledge of the sport in order to learn how to manage athletes and teams in an elite sport environment (Jones, Bailey, & Thompson, 2013; Mallett et al., 2013). This is required to progress from the beginner coach stage to the competent coach stage. In the last few decades, we have seen many "ists" (i.e., psychologists, nutritionists, physiologists) enter the coaching field, which implies that coaches interact with these specialists when reflecting on their coaching practice. Therefore, to become competent coaches, coaches have to develop their professional knowledge as well as interpersonal knowledge (Gilbert & Côté, 2013). Finally, in order to move from "competent" to "proficient" or "expert," elite coaches should be guided to reflect not only on problems, but also on strengths, sometimes referred to as a strengths-based approach to learning (Ghaye, 2011). To be among the best of the best, coaches cannot emulate other coaches – they have to innovate, be creative and adaptable, and maximize their strengths (Gordon & Gucciardi, 2011). Unfortunately, despite decades of working closely with coaches across a wide range of sport settings, it is rare to find settings that are engineered to nurture regular coach deliberate practice as we have described in this article. This developmental gap appears to be common across disciplines, as evidenced in Wagner's (2012) recent research on the educational system in the United States:

In the past, our country has produced innovators more by accident than by design. Rarely do entrepreneurs or innovators talk about how their schooling or their places of work – or even their parents – developed their talents or encouraged their aspirations. (p. 22)

Fortunately, Wagner also notes, “All the experts whom I’ve cited share the belief that most people can become more creative and innovative – given the right environment and opportunities” (p. 16). So, what can CDAs do to create the right environment and opportunities for nurturing the development of coaching expertise and coach deliberate practice?

First, CDAs should recognize that elite coaches are in charge of their development, but they need to be supported to maximize their development. Support from CDAs could start with a meeting with coaches to discuss their learning plans, and then to provide appropriate resources and funding. Among the different resources offered there should be what researchers have called “a critical friend,” such as providing an “opportunity for the coach to engage in friendly supportive relations outside his/her immediate coaching environment” (North, 2010, p. 252). We believe that CDAs could also provide the services of a “personal coach” to their elite coaches. The popularity of business and personal coaching is growing and is now “recognized as a powerful vehicle for increasing performance, achieving results and optimizing personal effectiveness. Because it has proved to be so effective, many companies, and government departments invest in internal and external coaching for their employees” (Bachkirova, Cox, & Clutterbuck, 2010, p. 1). The literature on expertise and business/personal coaching provides a good rationale to suggest that elite sport coaches would benefit from having a personal coach. As explained previously, to become an expert coach, one needs to regularly engage in deliberate practice. However, many coaches find it difficult to set aside time to engage in critical reflection and sustain the effort needed to challenge their mental models (Cassidy, Jones, & Potrac, 2009). With that said, a personal coach may be the missing element.

The International Coaching Federation (2013) defines personal coaching as “partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential.” For Parsloe and Leedham (2009) personal coaching “is simply two people having a conversation...but a very specific type of conversation and not everyone is used to having the patience and skills to help people learn in this way” (p. 9). As reflective practice and critical reflection are essentially conversations – either with oneself or with trusted peers – it is clear that providing sport coaches with access to a personal coach could greatly enhance the development of coaching expertise. We base this conclusion not only on our collective testing of this personal coaching approach with a wide range of sport coaches, but also on the deliberate practice research that displays “a consistent relationship between the amount and quality of solitary activities meeting the criteria of DP [Deliberate Practice] and performance in a wide range of domains of expertise” (Ericsson, 2008, p. 992). Reflective practice and critical reflection are exactly the type of solitary activities that comprise deliberate practice for sport coaches. There is no doubt in our minds that coach development can be optimized by creating settings that provide access to personal coaches for sport coaches. We want to reiterate here that we are not suggesting that every sport organization and athletics department hire a personal coach. Although this may be a viable option in some settings, a more cost-effective approach will be to train an existing member of the setting (athletics director, coach development officer or a sport coach) to serve in that role alongside their other duties (perhaps with a reduction in their other responsibilities). Criteria for identifying potential “coaches for coaches” from local settings could include personal characteristic such as: being approachable, respectful, knowledgeable, up-to-date, organized and trustworthy (Bloom, 2013). It is not enough to ask coaches

to engage in deliberate practice; the setting must include scaffolds to support coaches in their deliberate practice quests.

There are many personal coaching approaches based on different schools and traditions (Bachkirova et al., 2010). The approach proposed by Cox (2013) coincides with what we have discussed so far. According to Cox, coaching is synonymous with facilitated reflective practice as “coaching begins and ends with the client’s experience, whether that is specifically workplace experience or whole life experience, and in between is a complex process of phenomenological reflection augmented by critical thinking” (p. 2). As you can see, the personal coach we are referring to will play a different role than a sport psychologist, a mentor or an organizational consultant (Hawkins & Smith, 2013). To create a safe and reflective space, the personal coach will have to demonstrate core personal coaching competencies (i.e., active listening, establishing trust, powerful questioning, designing actions, etc.) (International Coaching Federation, 2013) and will use varied strategies to help coaches reflect on their practice (video, role playing, narratives, reflective cards, etc.). For example, the nondirective model of coaching by Joyce, Weil, and Calhoun (2009) can be used as a guide for those who assume the role of personal coach in sport settings. Olympic coach Jeffrey Huber (2013) provides suggestions for ways in which to adapt the nondirective model of coaching to coaching athletes. He explains that regular coach-athlete interviews should be conducted following a five-phase process. The five phases are: defining the helping situation, exploring the problem, developing insight, planning and decision making, and integration. We believe this five-phase nondirective coaching process could be equally applied to coaching coaches. For those who might question the willingness of high performance sport coaches to participate in personal coaching activities, Ericsson et al.’s (2007) comments are particularly insightful: “The development of expertise requires coaches who are capable of giving constructive, even painful, feedback. Real experts are extremely motivated students who seek out such feedback. They’re also skilled at understanding when and if a coach’s advice doesn’t work for them” (p. 121). We believe that those coaches who genuinely aspire to reach their potential as high performance sport coaches will be open to personal coaching and investing time in deliberate practice activities.

Conclusion

The purpose of this article was to highlight the importance of creating optimal coach development settings that support coach deliberate practice and the development of coaching expertise. As the Rutgers University case illustrates, ignoring the long-term development of coaches can result in unnecessary financial and emotional costs – to coaches, athletes, and entire athletics programs. We firmly believe that the settings in which coaches work must be re-engineered to include formal, regular and guided support to help coaches engage in reflective practice and critical reflection. In other words, coaches need coaches too. For several years, we have been experimenting with sport partners in the United States and Canada to create these types of re-engineered developmental settings. Our partners consistently report that the subtle changes we have helped them make in their settings directly contribute to enhanced coach and athlete performance. In short, these ideas – which we have borrowed and adapted from a wide range of literature – work. Further, we are encouraged in knowing that we are not alone in these efforts. For example, former Olympic coach Cliff Mallett and his colleagues (2013) in Australia have also experimented with similar strategies to optimize coach deliberate practice. They recently concluded:

In the case of workplace learning, those responsible for the environment (i.e., high performance managers, coaches and administrators) need to consider how potentially generative the learning context is for their high performance coaches. It is necessary for such people to ask the question: do our high performance coaches have sufficient time and resources allocated with the intended outcome of development? But it is not enough to have a potentially rich learning environment, it is the coach's perception of the environment that is of greatest importance. The individual must be considered to be central to what is and is not possible with regard to learning and development. (p. 473)

Performance expectations for coaches at all levels are increasingly high. We believe the provision of coach development resources has not kept pace with the increased demands and scrutiny placed on coaches and athletics programs. Although there is a relentless production of sport science that is being used to make finer and finer adjustments in athlete performance, similar widespread integration of learning science into the creation of optimal coach development settings has yet to occur. Taking simple, albeit challenging, steps like creating coach learning communities and providing access to personal coaches to stimulate and guide coach deliberate practice activities may be the missing link (Barnson, 2010; Gilbert et al., 2009). Movement across the stages of coaching expertise (beginner, competent, proficient, expert) will ultimately depend on each individual coach's decision to invest time in reflective practice and critical reflection in order to maximize the potential of all types of learning situations (mediated, unmediated, internal).

Recent literature reviews reveal an increasing amount of research on coaching expertise, with a particular emphasis on understanding the development of coaching expertise (Nash, Martindale, Collins, & Martindale, 2012; Rangeon, Gilbert, & Bruner, 2012). For example, the latest review by Nash and her colleagues shows that research on the developmental processes used to become an expert coach accounted for 30% of the 50 coaching expertise studies published between 1993 and 2009. However, they also found 27 different explanations of 'coaching expertise' across the 50 studies. These findings clearly show the interest in and need for continued dialogue and research on the development of coaching expertise. We would like to thank Christine Bolger for extending us the opportunity to contribute to this dialogue by sharing our ideas about the role deliberate practice plays in the development of coaching expertise. We look forward to continuing to learn from all the wonderful and insightful coaches we have been blessed to connect with, and sharing our evolving insights about coaching expertise with you in future writings and presentations.

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A Glimpse at the New International Sport Coaching Framework

Sergio Lara-Bercial, International Council for Coaching Excellence (ICCE)

Patrick Duffy, Leeds Metropolitan University/ICCE

The global significance of coaching and the awareness of the very important role played by coaches at every level of sport have risen significantly over the last decade. The International Council for Coaching Excellence (ICCE), in conjunction with the Association of Summer Olympic International Federations (ASOIF), brought together a project group in 2011 including a wide representation of international sport coaching stakeholders, organizations, and experts to develop the International Sport Coaching Framework (ISCF).

The Project Group is led by the Joint Chairs Marisol Casado (President of the International Triathlon Union, ASOIF Council Member and member of the International Olympic Committee) and Pat Duffy (Professor of Sport Coaching at Leeds Metropolitan University; Vice President - Europe of ICCE and Chairman of the European Coaching Council).

ISCF version 1.1 was launched at the Global Coaches House on August 1 during the 2012 Olympic Games in London and has been published by ICCE's partner Human Kinetics.

The purpose of the framework is to provide an internationally recognized reference point for the education, development, and recognition of coaches.

Coaches play a central role in promoting sport participation and enhancing the performance of athletes and teams. In nearly 200 countries, millions of volunteer and paid coaches guide the participation of hundreds of millions of children, players, and athletes. The organizations that employ them owe it to coaches to ensure they have sufficient educational footing, philosophical orientation, and resources to fulfil the duties expected of them.

A globally recognized reference point that provides a common, yet adaptable, set of criteria to inform, guide, and support the development and qualification of coaches has been long overdue.

Global to National to Local

The framework provides a blueprint that will have global application. This poses a significant challenge given the diversity of sports, countries, and contexts in which coaching is delivered. It is an attempt to establish a seamless connection for the support and management of coaches from the global to the national and local levels through the use of common tools such as:

- a shared terminology: a common language
- a definition of coaching roles and associated levels of competence and responsibility
- coaching performance standards for training, certifying, and evaluating coaches and enhancing their effectiveness

The Coaching Network

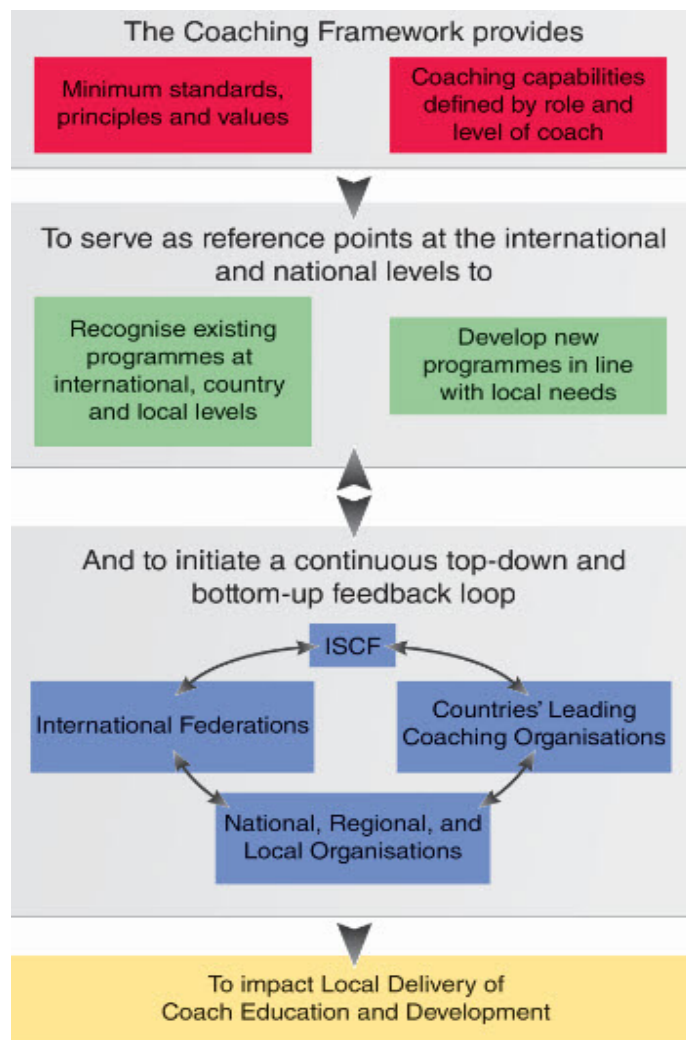


Coaching: A Process of Guided Improvement and Development in a Single Sport at Identifiable Stages of Athlete Development

While offering a generic definition of coaching, the framework recognizes the sport-specific nature of coaching as well as the social and organizational context in which coaching occurs. In this manner, far from being a one-size fits all or straightjacket, the International Sport Coaching Framework provides a set of principles to serve as a reference point and guidance to evaluate, develop, compare or design sport and/or locally specific systems.

Likewise, the framework recognizes that coaches are engaged in their role in different ways, from part-time volunteers, to part-time, and full-time paid employees. The terms of involvement vary by nation, organization, and sport. For this reason coaching should be considered a blended professional area where the roles of paid and unpaid coaches are recognized and interact with each other in different ways depending on the sport and organizational context.

Application of ISCF



Coaching Roles and Competencies

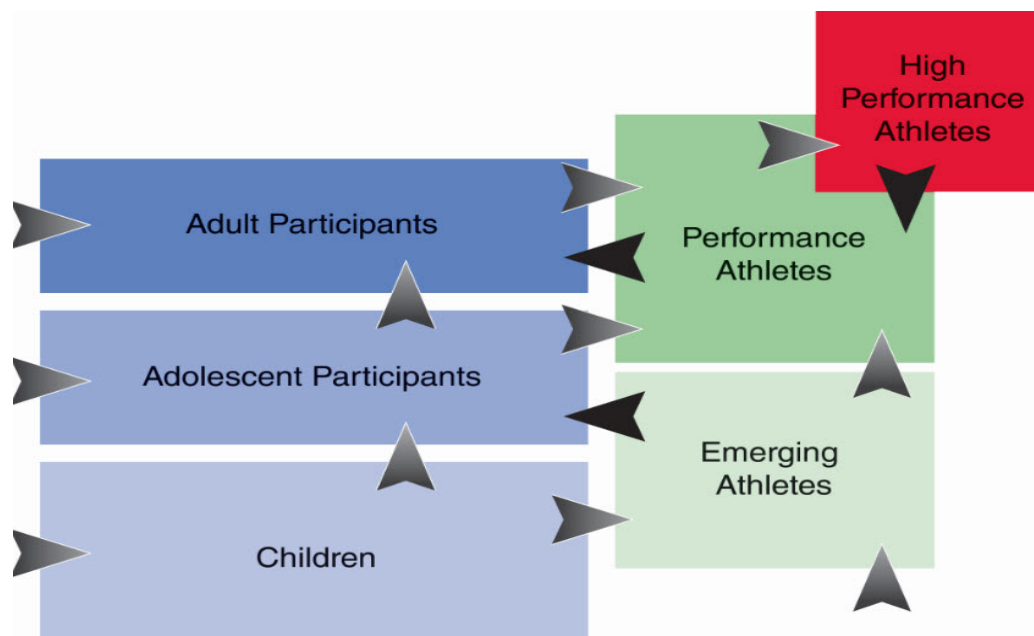
The ISCF promotes an athlete-centred approach to coaching. This approach states that in order for coaches to guide the improvement and development of an athlete, they must understand their motives to participate, needs, and stage of development.

Based on research and evidence from the field, two primary types of sport participation have been identified:

- **Participation Sport:** wherein taking part and achieving self-referenced outcomes (such as having fun, developing skills and engaging in a healthy lifestyle) are the priority
- **Performance Sport:** wherein the development of capabilities referenced against normative standards and evidenced in competition is the main goal

This classification of sport participants leads to the proposition of two main coaching occupations and six coaching domains. The number and makeup of the coaching domains may vary among nations and sports, but those identified here offer a useful starting point. It is also important to note that some coaches may simultaneously work across the two main occupations and within different domains depending on the nature of their role.

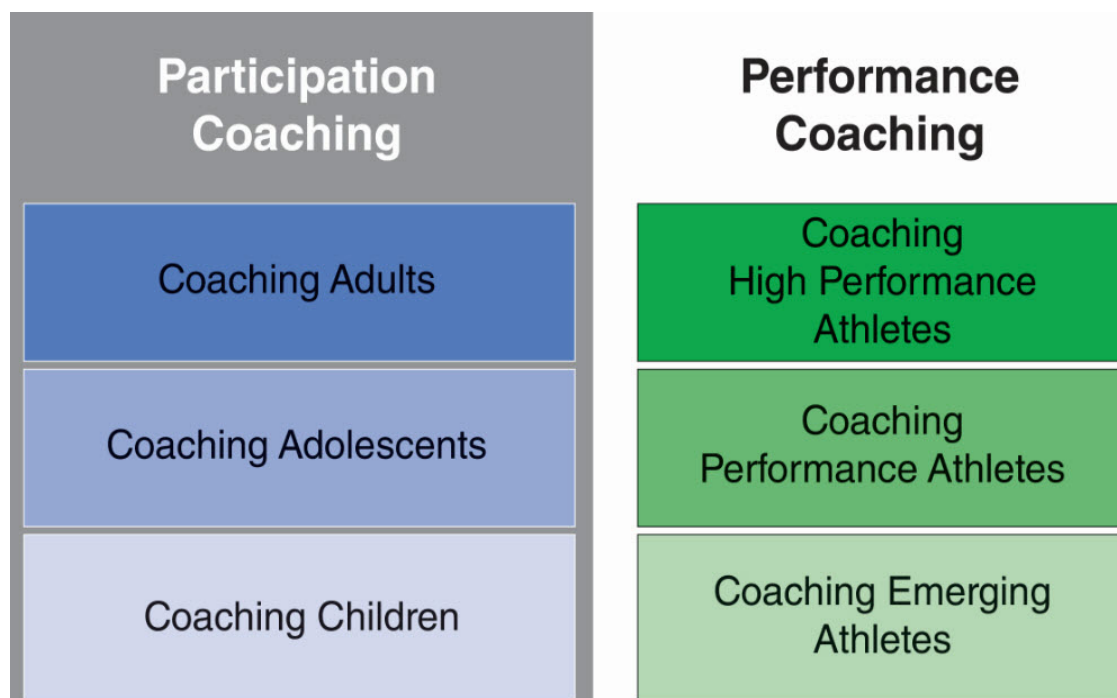
Sport Participation Spectrum and Pathway



Therefore, the need to tailor coach education and qualifications to both participation and performance coaching is recognised. The developmental journey of the coach should reflect the domains in which the coach will work. Consequently, clarifying the key roles that coaches may play across all domains is a critical aim of the ISCF, therefore providing the basis for adoption and adaptation in specific sports and nations.

The classification is based on a progression from simpler to more complex job requirements and increasing levels of responsibility.

Coach Occupations and Coaching Domains



Alongside the classification of coaching roles, the framework specifies six primary functions of the coach, all helping to fulfil the core purpose of guiding improvement and development. It also established that coaches are responsible for developing their capability to best support their athletes. This involves the competency to do the job, and is underpinned by relevant knowledge and shaped by the values and philosophies of the coach. The framework identifies three key knowledge bases coaches need to draw from to fulfil their roles.

Coach Development and Certification

The framework recognizes that for coaches to develop they require time, motivation, application, and practice. Learning will occur through exposure to a variety of situations and opportunities. Very often, coach education has been classroom-based, assessment-focused, and qualification-driven. However, research suggests that coaches learn better from practical experience and interaction with other coaches, pointing to the need to balance formal coach education with an equal or greater number of learning experiences on the field.

Ideally coaching roles, coaching qualifications, and coaching competencies would be closely correlated. These three key facets of coaching are often not aligned. Likewise, coaching qualifications should be referenced against appropriate national and international benchmarks in education and vocational training. How certification program from national and international federations might align with coaching roles and with other forms of educational advancement is shown in the Alignment of achievement standards with coaching roles.

Alignment of Achievement Standards with Coaching Roles

Coaching Roles	Achievement Standards		
	National and International Federation Levels	University/Higher Education Awards	Other Coach Education Institution and Agency Awards
Master/Head Coach	Level 4	University Degree or Postgraduate Degree	
Advanced/Senior Coach	Level 3	University Diploma or Degree	
Coach	Level 2		Coaching Certificate
Coaching Assistant	Level 1		Coach Introductory Course Award

The United States is recognized as a world leader in recognizing the importance of coaching in sport. Through the work of the National Governing Bodies and USOC, the opportunity now presents itself to use the ISCF to review current program and to influence a new international agenda on the role and importance of coaches at all levels of sport .

Framework Refinements and Future Benefits

The first published version of the ISCF is the initial step of many in creating relevant, sustainable, and high-quality coach education, development and employment systems world-wide. Adoption and implementation of the principles contained in the ISCF will benefit institutions, coaches, participants, and athletes alike. The impact of the framework diagram on page 36 shows an overview of the coaching community partners and the ISCF areas of impact.

Following publication of version 1.1, a period of consultation operated until February 2013. Version 1.2 will be published at the Global Coach Conference in South Africa in September 2013 (www.icce-2013.com). Thereafter, the framework will be refined on a quadrennial basis.

The full document can be obtained from www.icce.ws and hard copies can be purchased from Human Kinetics' Website: <http://www.humankinetics.com/products/all-products/International-Sport-Coaching-Framework-Brochure>

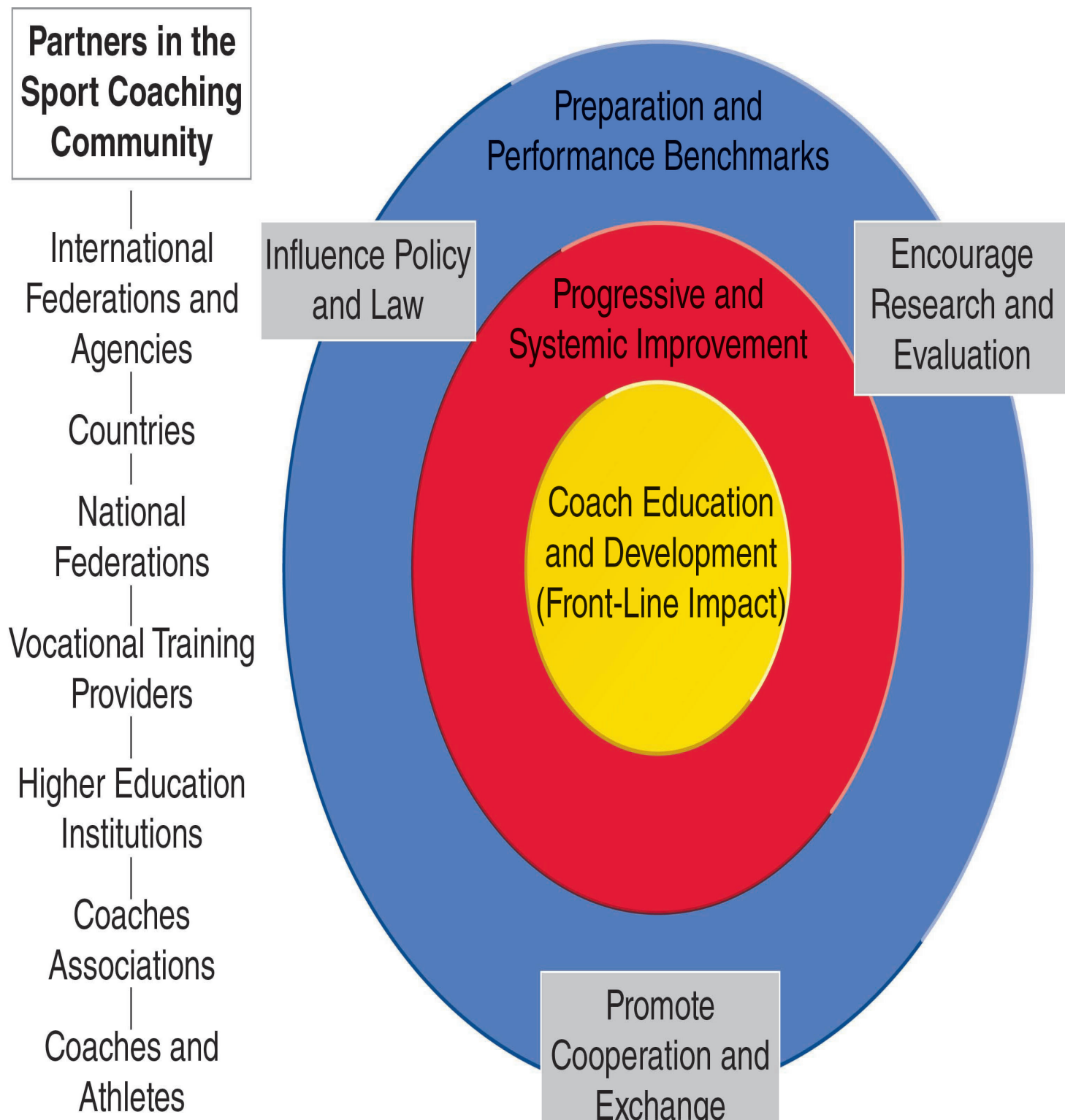
We encourage you to join us in our mission of providing clear reference points for the development of coaching and the support, education, and qualification of coaches.

The International Sport Coaching Framework is a joint endeavour led by the International Council for Coaching Excellence (ICCE) and the Association of Summer Olympic International Federations (ASOIF). ICCE – Formerly the International Council for Coach Education, the ICCE was established in 1997 as a non-profit international organization with the aim of promoting coaching as an internationally recognized profession and to enhance the quality of coaching at every level of sport guided by the needs of members, federations, nations, and key partners.



ASOIF – on May 30th, 1983 the 21 International Federations governing the sports included at the time of the program of the 1984 Summer Olympic Games decided to form the Association of Summer Olympic International Federations – ASOIF. ASOIF's mission is to unite, promote, and support the International Summer Olympic Federations, to preserve their autonomy while coordinating their common interests and goals. ASOIF members now total 28.

Impact of the framework



On the cover: Prince Harry helps light the flame with US Paralympian Lieutenant Brad Snyder (C) and Olympian Missy Franklin (L) as he attends the Opening Ceremony of the Warrior Games May 11, 2013 in Colorado Springs, Colorado

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