Wheelchair Basketball: Coaching, Classification, and Chaos
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ABSTRACT
Since its humble beginnings at the end of World War II, wheelchair basketball has incorporated a classification system for its players. The classification system ensures equal representation among team players and fosters positions and roles that are unique to the various levels of disability represented on a team (Goodwin et al., 2009). The increasingly competitive nature of this global game has necessitated an increasingly high level of coaching expertise. The purpose of this commentary is to take a practical look at the International Wheelchair Basketball Federation Player Classification System and the challenges it presents to a wheelchair basketball coach during the chaos of a game.

Key Words: coaching expertise, player classification, Paralympic sport
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As a basketball coach, just imagine if every player on your team had an assigned point value ranging from 1.0 up to 4.5 based on the player’s physical capacity to execute fundamental sport movements like running, jumping, dribbling, shooting, catching, passing, and rebounding. Now, imagine that at any given time during a game the five players on the court could not exceed a total of 14 playing points (International Wheelchair Basketball Federation [IWBF], 2006). Exceed it and you get a referee’s whistle and technical foul for your team. As a coach, simple math could mean the difference between winning and losing, gold or silver. How might player classification affect your substitution patterns, player combinations, and the decision-making process during the chaos and pressure of a game? What if you are just plain bad at math? Welcome to coaching the sport of wheelchair basketball.

Professional, interpersonal, and intrapersonal knowledge (Côté & Gilbert 2009) are attributes critical to being an effective coach in any sport. Research shows that the coach of an athlete with a disability must possess foundational knowledge common to all coaches as well as unique knowledge related to the athlete with a disability (DePauw & Gavron, 2005; Tawse, Bloom, Sabiston, & Reid, 2012). Classification systems have been and still are used widely in sport to allow for a fair and equitable starting point for competition (Richter, Adams-Mushett, Ferrara, & McCann, 1992). Youth football requires a minimum and maximum weight of players, while youth baseball has age and gender restrictions—all designed to provide maximum enjoyment, fairness, and prevention of injury (Winnick, 2011, p. 50). As coaches, we need to recognize and appreciate the unique dimension of coaching expertise required for a wheelchair basketball coach to master the skill of player substitution using wheelchair basketball’s player classification system. This specialized dimension of coaching needs to be further understood, discussed, and meaningfully researched.

Wheelchair basketball has always incorporated a classification system for its players (National Wheelchair Basketball Association [NWBA], 2008). In the United States, a 12-point medical classification system is used, with players holding player points of 1, 2, or 3. In an attempt to improve preparation of future players and coaches of U.S. national teams for international competition, many NWBA constituents are advocating U.S. adoption of the functional classification model used during all international competitions (International Wheelchair Basketball Federation [IWBF], 2006). The international Player Classification System was developed and proposed by Horst Strohkendl of Germany and used in a major international tournament for the first time at the 1984 Paralympic Games (IWBF, 2006). The classification system is based mainly on the competence of a qualified classifier to recognize a player’s physical ability to execute fundamental movements like handling the wheelchair, dribbling, passing, shooting, and rebounding (Vanlandewijck, Evaggelinou, Daly, & Verellen, 2004). This evidence-based system strives for accuracy, fairness, and reliability by including physical and technical assessments and direct game-play observations (IWBF, 2006). Classifiers are trained to observe and analyze movements during the player’s execution of various basketball skills while in their competition chairs, complete with all the leg, hip, and torso strapping they will use (most
players use velcro straps, padded ratcheting straps, or belts to become “one” with their wheelchair, thereby improving responsiveness and overall mobility). The main factors that determine a player’s “class” are trunk function, lower and upper limb function, and hand function (IWBF, 2006). In particular, trunk movement and stability form the basis for player classification. The sum of the player’s ability to move in all planes is referred to as “the volume of action” of a particular player, which is described as:

The limit to which a player can move voluntarily in any direction and, with control, move to the upright seated position, without holding the wheelchair for support or to aid the movement. The volume of action includes all directions and describes the position of the ball when held in both hands. (IWBF, 2006, p. 8)

The NWBA states that the purpose of the classification system in the United States is to encourage players with more severe disabilities to participate, to extend opportunities for participation, to encourage new teams, and to make competition more equitable among teams (NWBA, 2008). Player participation in this sense was originally meant to be purely recreational. However, with the development and evolution of the game, wheelchair basketball has moved beyond its recreational roots. In competitive settings, the classification system has necessitated coaching proficiency in its use, which has become a dimension of coaching unique to the discipline. Effectively coaching while using the classification system can best be learned through experience (playing and coaching), mentoring, and time with a team at practice and games.

In wheelchair basketball, game actions and positions highly depend on a player’s classification (e.g. Class I players are typically guards and Class 4.5 players are typically centers). Vanlandewijck et al. (2004) found that the performance of elite female wheelchair basketball players is class dependent. High-point players typically perform better than low-point players on the majority of skills that determine classification and overall game performance. “High-pointers” stay mainly near the lane on both offense and defense, maintain a high and flat seat position, and often have the best maneuverability and strength to rebound, tilt, and gain advantageous positions on the court.

As a coach, your starting lineup is probably built around a big and talented Class 4.5 center/forward. You now have four more players to put on the floor with only 9.5 points remaining. Often some of your best players are forced to sit on the bench because the numbers just do not work out. The coach’s ability to make substitutions based on an assessment of a player’s ability to positively affect the game, while also considering the player’s assigned classification point value, is not so simple under the pressure and pace of a championship game. I have found, through my experiences of both coaching and playing at the elite level, that this ability is a significant difference between the skill set of an expert wheelchair basketball coach and an expert standing basketball coach. Wheelchair basketball coaches have to make the same quick decisions to substitute players as a standing coach, but each exchange can tip the player point scale. This means that multiple substitutions may have to be made just to make the puzzle fit. “Low-pointers” (Class 1.0, 1.5, 2.0) are classified as such because they have a higher degree of physical limitations. These players are usually guards who sit lower and screen or “pick” for
forward or centers to help get them open and, in general, try to cause havoc on the floor. Some low-pointers are considered great players in their own right but are not typically 3-point shooters or consistent scoring threats. A team with talented low-pointers has much more flexibility to employ multiple players with higher player point values. As a coach, I always love having the Class 3.0 (and above) players on the floor because these are the Michael Jordans, LeBron James’, John Stocktons, and Lisa Leslies of wheelchair basketball. In a game where players can “tilt” their chairs (leaning weight on one wheel and balancing on that same wheel to gain position on an opponent), these players can and do dominate games inside and near the lane. The challenge is to get more than two of these players on the court at the same time.

During a game it is infrequent that two Class 4.5s would be on the court at the same time. It is almost like playing 2-on-5 in some respects. The coach now has only 5 points left for three spots on the floor. This is too weak a team to go against a team with a physical Class 4.5 center, an athletic Class 3.5 forward, a savvy and quick-handled Class 2.5 guard who bombs three-pointers, a pesky Class 2.0 guard who can shoot behind a screen from the “bank” all day, and a Class 1.5 player who initiates your offense and pressure defense. The combinations seem endless and can challenge even the most seasoned wheelchair basketball coach.

I have played and coached against numerous legendary players, some who stood 6’10” tall and sat their wheelchairs at the maximum seat height of 21” allowed by rule (IWBF, 2006). Many were amputees or had minimal physical disabilities. Strategically you might choose to send a couple of “low-pointers” to press “the bigs” full-court, but this risks giving your opponent a numbers advantage on the other end of the court (like a 3-on-2 or 2-on-1 fastbreak). The hope was that the high-pointer was out of condition and his or her arms would eventually tire and burn out. Regardless of the decision, an important strategic choice has to be made that ultimately can determine the outcome of a game. In the end it still comes down to knowing your rotations and the combinations of players, by classification, that play well together.

Why not just play an “open” game where there is no classification system and the coaches just play whomever they want, whenever they want? Wheelchair basketball coaches would be relieved of the burden of calculating player rotations based on classification, and the game would feature the best players based on ability, not disability. In Canada, in an attempt to fill geographically remote team rosters and give spectators a sport they might relate to more closely and respect for its challenges, able-bodied players are integrated and given a classification of 5.0 (Wheelchair Basketball Canada, n.d.). The wheelchair and strapping, however, remove most lower-body physical advantages, so able-bodied athletes in wheelchairs do not necessarily have more functionality (or skill) than traditional high-pointers. Athletes who use a wheelchair all day typically have much more experience with movement in it and, in general, can outperform able-bodied players on most wheelchair skills. Over the last three Paralympic Games, the Canadian Men’s Wheelchair Basketball Team has won two gold medals and one silver medal. One can only speculate as to the positive contribution to this success made by able-bodied players, who are ineligible for international competition.
Other countries, including the United States, have different attitudes about allowing able-bodied players or the notion of eliminating the classification system. My 30 years of involvement in the sport of wheelchair basketball has led me to believe that it is taboo to allow an able-bodied person to sit in a wheelchair and play wheelchair basketball in the United States. Does this keep the sport from gaining social acceptance or major corporate sponsorships for the league and its individual players? Maybe so, but unlike many countries throughout the world (e.g., Germany, Turkey, Italy, Australia) the United States does not have a professional wheelchair basketball league that pays players, televisions games, and attracts thousands of spectators. We must remember and appreciate that the game of wheelchair basketball was founded on the basic premise of inclusion and participation. By adopting an open system, too many athletes with more physically limiting disabilities would be involuntarily left out of the game. The sport would lose its essence while becoming politically disjointed within its own membership.

Wheelchair basketball is a physically demanding sport that requires ability, speed, and strength. The sport has continued to grow globally and has maintained its meaningful status in the Paralympic movement based on its inclusion of different levels of disability for its players. Cracking it into pieces based on a hierarchy of physicality and excluding otherwise world-class athletes makes a mockery of the standards of inclusion that the game was originally built upon. What would the NBA be without the second- and third-tier role-players who epitomize the sporting spirit of maximum effort, persistence, determination, and an undying will to win? Wheelchair basketball embodies these characteristics, and the game would lose its legitimacy in and as a disability sport without the use of a player classification system. This is an inclusionary system that is necessary for the continued growth and success of the sport of wheelchair basketball.

Wheelchair basketball continues to grow worldwide and must encourage new and talented young coaches to consider a career in coaching using the classification system. It is a distinctive game in which the athletes who compete are unique and therefore require coaches with specific, specialized experience and expertise. Coaching education and mentorship programs that include the skill of coaching using the player classification system must be further developed and implemented at the club, collegiate, and professional levels. Through these formal educational opportunities and field-based experiences—including camps, clinics, and formal mentorships—novice wheelchair basketball coaches can be trained to become expert coaches who effectively use the player classification system.
References


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