WHAT WE MEASURE

VOLUME AND INTENSITY

OVERLOAD

Improvements in any aspect of physical performance can only be brought about by exposing an athlete to stresses (load/exertion) beyond that which they are accustomed to. Of course, any increase in load must be carefully managed, balanced and monitored to ensure that athletes are not being placed at serious risk of injury. Athlete monitoring technologies like Catapult and VERT play a key role in this process, enabling teams to identify and track key physical performance metrics. This is particularly crucial at times when overload is being applied (e.g. training sessions) and can improve the program’s capacity to mitigate injury risk while simultaneously optimizing athlete performance.

INDIVIDUALIZATION

Even in elite sport, individuals differ in their capacity for exercise due to a series of factors such as age, genetics, training history, skill level and motivation. Given these inherent discrepancies between athletes, coaches and sports scientists shouldn’t expect individuals to react in the same way to set drills. By using these technologies, it becomes easier to quantify how individuals are responding and adapting to their training programs. Through the analysis of this data, it becomes easier to build a level of individual flexibility into the program and build in the appropriate adjustments and allowances.

AVOIDING REVERSIBILITY

Reversibility is the process by which athletes can lose fitness during periods of reduced activity. Put simply: if an athlete doesn’t use it, they lose it. In the same way that positive adaptations follow periods of overload, negative adaptations will follow periods of less (or no) activity. It is crucial to monitor athletes closely to ensure that training programs avoid reversibility and keep them on an upward trajectory of positive adaptation.

VARIATION

There is a danger that athletes may become bored or unmotivated if subjected to a monotonous technical or physical training program. Constant repetition of the same work can lead to plateaus or drops in performance, achieving the opposite of the intended result. These issues can be avoided by ensuring that the program contains enough variety in terms of drill repetitions, sets, volume and intensity. Athlete monitoring technology is invaluable to this process, providing a mechanism by which practitioners can evaluate the variety in a training program and intervene where required.