What is VWC?

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With improving technology moving virtually at the speed of light it is inevitable that technology and the world wide web is having a profound effect on the way we work with sports people as coaches, strength and conditioning specialists, sport scientists, and the plethora of other support services that can be provided to athletes.

Because of this the hpc has once again geared up for the challenge with the new and exciting software and web support called Virtual Web Coaching. Considering the multi disciplinary approach we at hpc use VWC is the key factor in bringing all the information to all the disciplines together in real time.

When using this approach in developing and supporting top level elite athletes and our academy athletes our major constraints are the fact that we were not getting quality information in real time about each athlete to the parties involved in their support.

In the case of the hpc academies we have the following multi disciplinary team working with the sports academies:

1. The sports or Head coach
2. Strength and conditioning specialist
3. Sport scientist
4. Bio-mechanical and video analyst
4. Medical doctor
5. Physio therapist
6. Dietician
7. Sport Psychologist

Now with over 250 athletes in the academies and 7 experts needing to know as much quality information as possible about the athletes training sessions and well being they are working with, it is a near impossible task to give feedback on each athlete in the academies as close to real time as possible on their training. This is what makes VWC so powerful because this software integrates all the disciplines year plans into one file as well as each athletes phase of strength training and sports training programme.

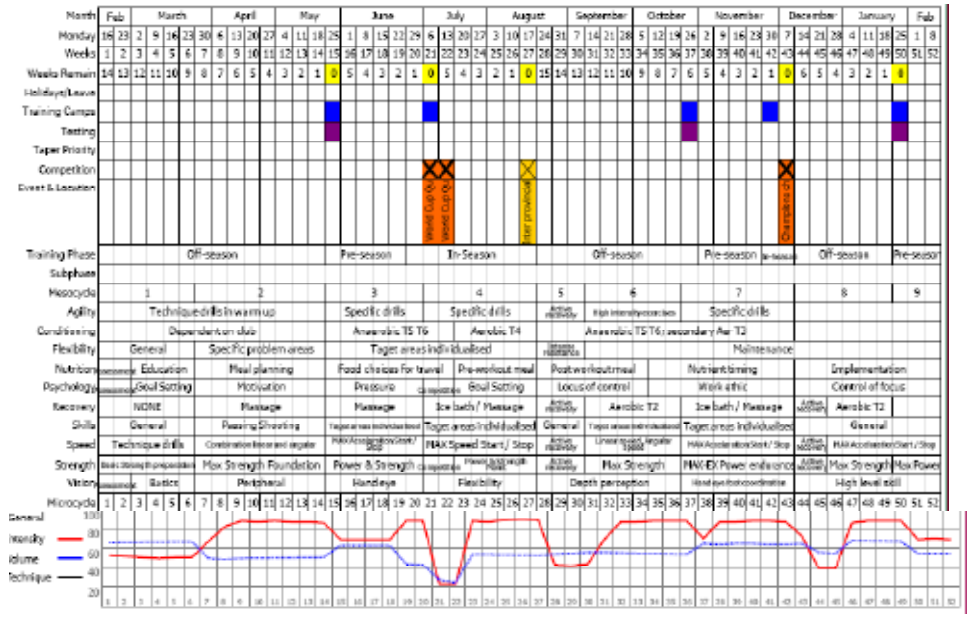


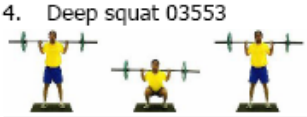
Fig 1. Year planner example

This is made possible through the use of VWC's planning, programme design tools and templates that has over 6500 exercise and stretch movie clips and photos all in full colour. This makes the exercise programme easy to interpret and makes the implementation of the programme so much easier an effective.

3. Clean hang 00043

Rest		2 min	Explosive																
Reps			6	reps	3	reps	3	reps											
Perceived effort			Easy	RPE	Med	RPE	Hard	RPE											
2009/03/07 Sat																			

4. Deep squat 03553



Rest		1 min	Moderate																
Reps			10	reps	6	reps	6	reps											
Repetition Maximum			20	RM	10	RM	6	RM											
2009/03/07 Sat																			

5. Bench press 00339

Rest			Moderate																
Reps			10	reps	6	reps	6	reps											
Repetition Maximum			20	RM	10	RM	6	RM											
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Fig 2. Excerpt from Strength training programme

But wait, this is only the tip of the ice berg! After all the planning has been done and programmes have been designed according to the test results, each athlete has a web account to which their year plan and only their own programme gets uploaded where they can check online what their programme entails as well as look at video clips of their workout. Imbedded in their online programme there is also a daily training dairy that they can enter after each workout or selected sessions. It is within this dairy where the magic happens! After the entry is made the coach or strength and conditioning specialist gets an e-mail with each athletes dairy entry and they can see exactly what each athlete entered thus knowing in real time what the athlete experienced in their session and regarding quality of sleep recovery any injuries illness appetite and even heart rate. Within this system we set certain triggers to allow an e-mail to be sent to the correct person within our multi disciplinary team should they need to know about a state or event the athlete experienced. For example if the athlete has had poor quality of sleep and poor mood state an e-mail will be sent to the sport psychologist so that if needed the situation can be followed up should this be a regular occurrence.

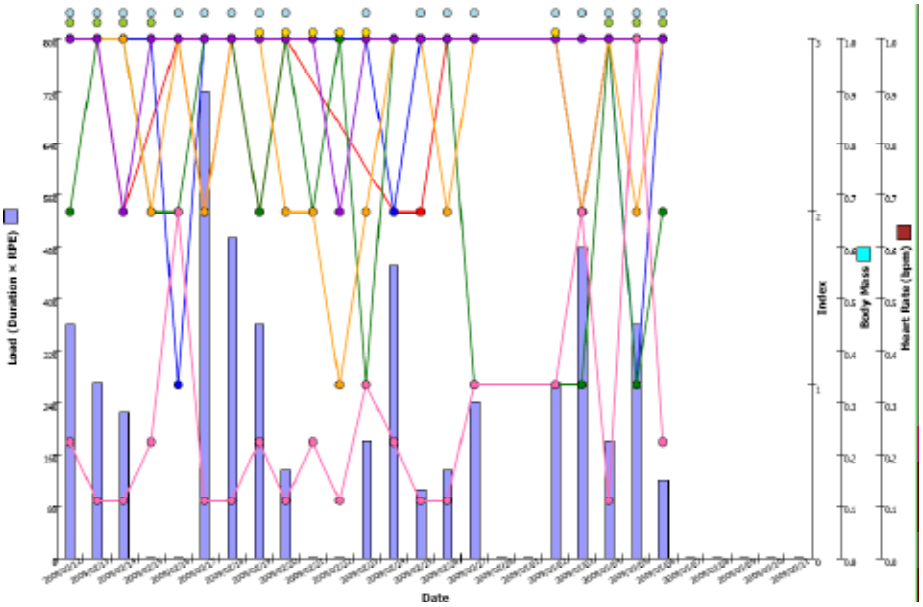

Fig 3. Dairy analysis

Over and above this the dairies can be downloaded regularly for analysis and we can start to gather extremely high quality data about each individual and sport. With the analysis tool we can start to pick up trends within athletes and different sports to anticipate and prevent over training injuries and illness as well as designing individualised recovery and training strategies. We can also analyse strength and conditioning programmes to determine how much strain is being placed on each muscle in the body with regards to load, intensity and speed of movement.

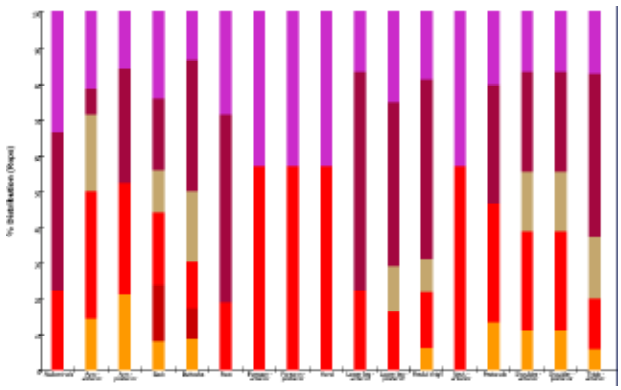

Fig 4. Strength programme analysis according to anatomical % repetition distribution

Fig 5. Exercise description

Each of the 6500 exercises can be broken down into showing exactly all the muscles being used and giving examples of related exercises.
The software has a full anatomical encyclopaedia and glossary of sport science / strength and conditioning terms with full descriptions.

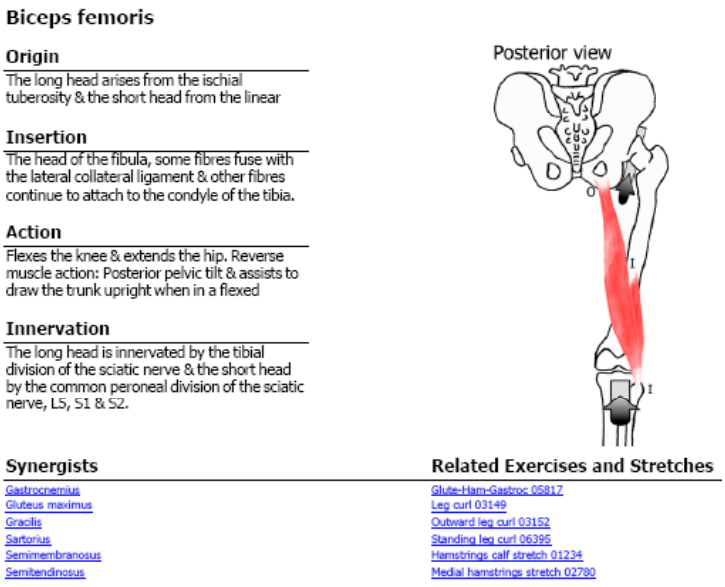

Fig 6. Anatomical description

It has a search engine with which you can tailor the search parameters to find the exact exercise you are looking for even running and swimming drills and techniques.

As far as strength and conditioning software and support goes Virtual Web Coaching is second to none.
It gives un-paralleled Analysis tools, Planning, Education, Anatomy, Training Diaries and Templates plus many other benefits that save you time and improve your knowledge. Thus developing not just our academy and elite athletes but also our multi-disciplinary support team.