

Training Day on Saturday 30th November 2019 at BrynMawr Foundation School

Morning training session

Process goals for the session:

1. For athletes to understand what paces they should work at when doing VO2max work (part 1 of the session), easy runs (part 2 of the session), and fast work (part 3 of the session)
2. To train at VO2max (regular sessions at VO2mas - at least once a week - will over time increase the amount of oxygen athletes can take on board, increasing the size and efficiency of the part of the engine which uses oxygen)
3. To practice running at speed when tired (part 3 of the session). Always good to work on speed, as always want to be able to be quick at end of a race when tired. Also to focus on form when running fast, as this will improve efficiency when running.

RAMP warm up

Raise heart rate - 2 laps of the track jogging with pace getting slightly quicker

Activate and Mobilise muscles (kept active in order to keep warm in the cold weather)

- High knee walks
- Lunge walk
- High knees
- squat walk
- Hamstring sweeps
- A-skips
- Heel recoveries/ leg cycling
- Two foot bounce on the spot
- Straight leg running

Potentiate so ready for session

- 2 x 200m at pace will be doing session at, with 90s recovery (This part of session very important for two reasons. Firstly it gets to body physically and mentally prepared for the session ahead. Secondly, it ensures athletes know what the pace they will run the session at feels like)

Main session

Part 1: 1x800m, 2x600m, 4x400m. Recovery is jogging for same length of time that the rep took. Reps were run at VO2max pace.

Coaching tip for part 1: Athletes split into groups, and in each groups athletes had similar 1500m and 3000m times. From these PBs times, Daniel's table was consulted to determine VO2max pace for the athletes. If Daniel's table not available, then run at 3000m PB pace.

Part 2: 10min relaxed run

Coaching tip for part 2: Encourage athletes to run at a pace where they could easily hold a conversation.

Part 3: 3 laps of jog the bends and fast on the straights

Coaching tip for part 3: Do not time the 100m efforts, and film the athletes. This will allow you to focus on the athletes technique, and if you film it will allow you to look at their technique later.

Warm down

Easy jog to gradually bring heart rate back down, followed by static stretching (approximately 15s for each stretch) to remove tightness from muscles:

- calf (hands against wall, straight back leg)
- achilles (hands against wall, bent back leg)
- hamstrings (straight legs, reach down and touch the floor)
- quads (stand on one leg, pull leg back so knees are together)
- groins (sat on floor, soles of feet together, push knees as close to floor as possible)
- gluts (sat on floor, cross leg over other leg and pull knee as close to shoulder as possible)
- lower back (lie on floor, keep both shoulders on floor, pull knee across body)

Afternoon explanation of why VO2 max sessions are useful for athletes

Unlike a car which has one fuel source (petrol), humans have three fuel sources: oxygen, glycogen and protein. VO2max training sessions work at the pace where we are taking in the maximum volume of oxygen we can. If we regularly do VO2 max sessions then we will adapt to increase the volume of oxygen we can take in, making our running engine bigger. If we do these sessions too fast, than oxygen alone can not supply the engine with enough energy, and we have to also use glycogen. Sessions which require glycogen take longer to recover from, and therefore whilst useful, we must not try and do too many of them and must think carefully when in the year to do such session. Generally these session would be during outdoor or indoor track season (800m and 1500m), and not in the two or three days before a race. However it is very important to have regular sessions which focus just on VO2 max all year round, and definitely during the winter and XC season.

Afternoon athlete lifestyle workshop session

Process goal for the session:

To know the difference between outcome goals and process goals, and to understand how process goals allow you to achieve your outcome goals, whilst having outcome goals without process goals means far more chance you will not achieve your targets

Outcome goals are a target time or a target position.

Examples of outcome goals would be sub 5minutes for 1500m or medal at Welsh Schools Cross Country Championships

Process goals are knowing what you need to do to improve performance.

Process goals include running engine goals and running efficiency goals.

Examples of running engine process goals would be to run the session at VO2max pace, or to run you easy runs at a pace where you can easily have a conversation with the person you are running with

Examples of running efficiency process goals are keeping your hips high when running (not sitting down) and holding the correct position when doing a plank for as long as possible (therefore increasing the strength of your core muscles,).

Afternoon conditioning session

Process goals for the session:

1. **To strengthen your core muscles (gluts, abdominals, lower back) so that which will allow you to hold your core with more stability when running, therefore reducing injury risk and amount of energy wasted_**
2. **To strengthen your posterior chain (the muscles on the back of your legs - gluts, hamstrings, calves). These are the leg muscles which work most when running. Therefore if stronger, you can generate more force and will therefore move more efficiently. Also will reduce chance of the muscles fatiguing and getting injured.**

Core Circuit (3x20s on each exercise, increasing to time to 30s and then 40s when able to. Must be able to do the exercises properly for the whole time you are doing it)

Plank

Key points to remember: straight line from shoulders to feet, tense abdominals (think holding in wee or getting belly button to as close to back bone as possible), tense gluts, to ensure straight back imagine tucking tail in between your legs

Side Plank

Key points to remember: straight line from shoulders to feet (perhaps use line on float of sport hall as a guide with ankle and elbow on line), keep top shoulder directly above lower shoulder (perhaps stick arm straight up in air as a guide), tense gluts and abdominals

Dead Bugs

Key points to remember: back flat on floor, tense your abdominals to ensure that back does not arch as you lower arm or leg. Someone should not be able to put their hand under your back whilst you do the exercise

Supermans/Bird Dogs

Key points to remember: on your hands and knees, neutral back position (not too arched up or too curved down). When lift arm or leg ensure your back does not move. Can put a shoe or tennis ball on back to stop back from moving.

Posterior Chain Circuit (3x10 on each exercise, increasing to 15 and 20 when able to. Must be able to do the exercises properly for the whole time you are doing it)

Clams

Key points to remember: Flat on side, straight line from head to knee, leg below knee bent back, all movement from the gluts, top foot off bottom foot makes harder

Hamstring bridge

Key points to remember: on shoulders, with both feet flat on floor, straight line from knees to shoulder, slowly lower middle of body to floor, then slowly push back up to straight position. Make harder by doing single leg

Calf raises Abduction

Key points to remember: On both feet, push up slowly onto toes, and lower slowly, stand upright, once can do easily try single leg

Side-lying Abduction

Key points to remember: Flat on side, straight line from head to knee on, bottom leg knee bent, top leg straight, lift leg straight up