

Monitoring versus TID testing

By Peter Shakespear



Overview

- ▶ 1. Why Test and Monitor?
- ▶ 2. Field test versus Laboratory testing
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- ▶ 4. When To test and monitor?
- ▶ 5. TID testing
- ▶ 6. Frequency of assessment
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1. Why Test and Monitor?



2. Field test versus Laboratory testing

- ▶ Field test versus lab test
- ▶ Fielding test in the gym
- ▶ Test to measure changes and monitor to measure efficiency

- ▶ Field test - regular accuracy
- ▶ Field Tests should be done regularly to provide quick analysis of training effectiveness

- ▶ Lab test - recording results
- ▶ Laboratory tests can provide important “milestone” evaluation in significant areas e.g. VO2 max

3. What To test and monitor?

1. Competition
2. Coach
3. Outside Comfort zone
4. Specific Goals
5. Concentration and attention
6. Feedback
7. Mental Image / Representation
8. Build on existing skills
9. Beginners have correct fundamental skills

4. When To test and monitor?

- ▶ **LABORATORY TESTS:** tests are usually well researched and repeatable with reliable protocols. Often expensive and hard to organize with valid professionals. As a result, often long time between scheduled tests. Good for **spot analysis** of training state at time of test.
- ▶ **FIELD TESTS:** Accuracy comes from regular testing to produce **trends** in training. Usually conducted regularly (monthly?) by coaches in training environment (ergs) with little or no expense and included as part of training. Instant feedback on trend from previous testing.
- ▶ Sport Specific and Non Sport Specific

5. TID Tests

- ▶ Strategy
- ▶ Pacing ergo
- ▶ When to test - frequency
- ▶ How to improve performance

- ▶ ANTHROPOMETRICS
- ▶ Measure: Height | Arm span | Weight
- ▶ STRENGTH: C2 DYNO
- ▶ Measure: “WORK” Nm - [Force x Distance]
- ▶ FITNESS: Schwinn Arm Leg Bike
- ▶ Measure: RPM - Step test



6. Frequency of assessment

| ASSESSMENT AREA | WHEN |
|---------------------------------|--|
| 1. BOAT SPEED | Skill stage, measure regularly, control expectations |
| 2. TECHNIQUE | At all times and stages |
| 3. ENDURANCE | Peripheral Gains evident in 6 weeks. Central? |
| 4. POWER | Neuromuscular Gains can be made in 1 week |
| 5. FLEXIBILITY | Continuous long term assessment -> motivation |
| 6. CORE STRENGTH | Develop pre season, then maintenance |
| 7. PACING | Regularly – always developing this attribute |
| 8. POSTURE | Early emphasis (beginner) then maintenance |
| 9. Psychological, tactical etc. | As part of above tests |

7. Assessment as part of training

- ▶ »The Ideal Field test is to measure performance as part of training set e.g. producing measurable scores on ergometer or in the boat over set distances, rates and times where the only difference is the athlete performance (6km erg test?).
- ▶ »Extensively used in swimming
- ▶ »Incorporate Heart Rate and lactate assessment
- ▶ »More use of BOAT SPEED
- ▶ »Be aware of the principle of stress to improve performance!

8. Test to achieve improved performance

- ▶ **ANALYSIS**: Long term review of test results should provide a guideline to assessing individual response to training
- ▶ **INDIVIDUALISATION**: Each athlete deserves to have an objective response from a coach about their individual progression
- ▶ **CONTINUAL PROGRESS**: “Flat Lining” or no progress should not be tolerated by athlete or coach
- ▶ **IMPROVEMENT STRATEGY**: Coaches should look at indicators leading to zero improvement

9. Practical examples

| ASSESSMENT AREA | FIELD TEST |
|--------------------------------|--|
| 1. BOAT SPEED | Splits (time/500m), Distance/stroke, time, rate |
| 2. TECHNIQUE | Minimum strokes, 1km R24, Rhythm, Posture, Boat acceleration |
| 3. ENDURANCE | Lactate at power (watts), 30min or 6km erg? |
| 4. POWER | Eg 10 strokes at max watts, Wts: 1RM, 3RM |
| 5. FLEXIBILITY | Straight leg raise (degrees from vertical) |
| 6. CORE STRENGTH | Time: Planks to failure |
| 7. PACING | % speed 1st 500m, Pacing erg (-ve split) |
| 8. POSTURE | Rating 1-5 of hip rotation at catch (on erg and water) |
| 9. Psychological, tactical etc | As part of above tests |

Questions?

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