

Epley Advantage Performance Index

Get the EPLEY ADVANTAGE

“Innovation for more than 50 years has led to these advanced methods of measuring performance indicators. I welcome you to the future”

– Boyd Epley –

Introduction

When I was hired by Nebraska I was told, if anyone gets slower you’re fired. I had to borrow a stop watch to measure 40 times to show the athletic director the Nebraska players were getting faster thru strength training – a fact that helped change training for athletes across the world. I’m excited to see Nebraska take the lead again by offering a Performance Testing Combine at the annual Nebraska Coaches Clinic starting in July 2023.

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EPLEY ADVANTAGE Performance Index

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Submitting Results for NE High Scholl State Championship

Setting Goals

Every strength and conditioning program should begin with the testing and evaluation of each person participating so goals can be set for the training program. Post testing done at the conclusion of the training program will provide valuable data to evaluate how each athlete progressed and whether your training program worked. The post-test improvement will be determined by the effort in the training program you have implemented. A training program should produce improvement for each athlete based on their level of maturation. Athletes new to training should make progress at a faster rate than athletes that have been training for years. By tracking athletes' strengths and weaknesses, it is much easier to direct their training to achieve maximum results. Testing also serves as a great motivator. Regardless of which training program you choose or which equipment you choose, pre and post testing results will determine if your program is effectively achieving your goals.

Some schools begin a lifting or running program right away without the benefit of knowing where each athlete is in their development process. The key is to get the athletes to want to achieve new goals. This can be accomplished by showing them where they are in the pre-test and setting goals to improve in the post test. Once the athlete begins achieving goals they will be motivated and eager to set higher goals. **There is no greater reward than to achieve a personal goal.** Testing is step one, **Evaluation** of the results is step two, **Setting Goals** to achieve in the training program is step three and doing the **Training Program** is step four.

Pearson's Law - "When performance is measured, performance improves. When performance is measured and reported back, the rate of improvement accelerates."

The coaching staff must do an accurate job of taking measurements during testing. Accurate measurements are not a problem if you are conscious of VALIDITY, RELIABILITY, and OBJECTIVITY.

VALIDITY

Each test must measure the component it is constructed to measure. *Does the test used to measure performance potential correlate to the specific sport in which the athlete participates?* Coaches can be creatures of habit testing things they have always tested regardless of if they actually measure talent. Years ago, Mike Arthur and I did a regression analysis on the tests we were doing which caused us to eliminate several tests because they did not reflect potential in the areas we want to improve for power sports. As a coach of a power sport, you can include any test that you want to, but you will benefit most if you focus on the **vertical jump or standing broad jump, the pro-agility (5-10-5, and 10 yard dash and or 40 yard dash to identify talent for your sport.**

RELIABILITY

Reliability is dependent upon the coach keeping testing conditions and results consistent each time. The testing results will be different if testing is done outside on the grass one time, then inside on the basketball court another time. The condition of the field, the time of day, wind, rain, temperature, etc. all have some level of environmental effect on the testing results.

The order the tests are given can also affect the results. **The testing order needs to be the same each and every time for each group and the testing equipment needs to be the same each time.**

OBJECTIVITY

Have the same coaches administer the same test each time, if possible. This will insure more consistent operation/instruction. If different coaches are used, be sure the tests are administered in exactly the same way to end up with accurate results.

Organize Equipment and Facility

The more you do in advance; the smoother the testing session will go. Determine the equipment and facilities that will be needed and have them ready.

Annual Performance Test Cycle

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|----------|---|
| Test # 1 | When athletes report |
| Test # 2 | When season is over |
| Test # 3 | At the start of the off-season conditioning |
| Test # 4 | After the off-season program |

Performance Test Selection

Keep in mind some simple guidelines when choosing performance tests: The tests should be safe and easily administered. The athlete's mental state can affect the results of the test; lack of sleep could influence the testing results, as could personal problems, minor injuries, anxiety, or a lack of motivation. These factors may be difficult to detect or to prevent.

Anthropometrics and Athlete Information

In addition to standard biometric data such as height, body weight, Date of Birth, reach, wingspan, etc.

Recording and Storing of Data

Spreadsheets are a common tool for recording and storing your data. Some coaches have a tablet or laptop to which they enter in data as they measure it, others use note cards for each athlete and then copy the data over after the fact. **Both of these methods work just fine, but if you are wanting to streamline the process, save time, and reduce human error – use [Dashr's online dashboard](#).** Then your results (timing, jumping, biometrics, etc.) can be automatically saved and stored on the cloud – for management and export to a spreadsheet. You might have 20 testing stations with 20 coaches logged into the Dashr App all in real-time entering and saving data to your account which you can view live on the online Dashboard. There is no limit to the number of testing stations you can have with Dashr without having to wait for someone to turn-in their data collection card or trying to read someone's handwriting from a data collection card to enter the data later. Your coaches and administrators can see the data immediately.

Outline of suggested measurements/tests

Height Measurement (required for Index calculation)

Reach Measurement

Body Weight (required for Index calculation)

Wingspan

1. 10 yd Dash (required for Index calculation)
2. Pro-Agility (5-10-5) (required for Index calculation)
3. Broad Jump (required for Index calculation)

EPLEY ADVANTAGE PERFORMANCE INDEX

We have analyzed over 20,000 cases of Division I athletic performance and developed a testing methodology, which measures baseline athletic aptitude along a standardized point scale, controlling for weight. The tests we are recommending correlate with on-field performance. They have been included in a composite indicator called the EPLEY ADVANTAGE PERFORMANCE INDEX. The (EAPI) is a general indicator of potential performance. It is an instrument that is very useful in identifying raw athletic talent. It should be noted that there are other elements related to on-field performance, such as practice field work habits, game day heart, level of skill development and the intangible intuitive feel for the game.

The EPLEY ADVANTAGE PERFORMANCE INDEX (EAPI) features:

1. It is based on a decathlon-type scoring system, where athletes receive points based on their performance. The faster they run, the more points they receive etc.
2. The **(EAPI)** is scored 0 to 1,000 points for each event. The index has been standardized so that a score of 500 is considered a solid, NCAA Division I performance.
3. The **(EAPI)**, which has been developed for both males and females, includes the 10 yard dash, the 5-10-5 agility run, and standing long jump. The 40 dash can be included but is not necessary to identify talent if the 10 yard test is done. The index scores are combined for an overall Performance Index.
4. The **(EAPI)** controls for weight differences, to identify the elusive, “pound for pound”, who is the fastest, most powerful athlete. Lighter athletes are expected to run faster in the running events.
5. By examining the scores received for the various tests, both athletes and coaches can easily see areas of needed improvement.
6. The **(EAPI)** is not only a solid indicator of potential on field performance, but also an extraordinarily powerful motivational instrument.
7. The **(EAPI)** can also be used to measure the effectiveness of training programs and can serve as a warning of possible overtraining.

Strength Testing (Strength tests include the bench press, squat, and hang clean – they combine for an overall **EPLEY ATHLETIC STRENGTH INDEX or (EASI)**. This will not be included in the Nebraska High School State Championship but is available at [online](#).

Individual Profile

Next coaches should evaluate athletes individually. The performance scores from one test period alone don't tell the entire story. A history of each athlete's testing should be kept. This allows the coach to evaluate the type of progress the athlete is making from one year to the next. The athlete will show the most progress in the first year of training. Each succeeding year less progress is made as they near their athletic potential. The key is to continue to show progress in the areas in which the athlete has weaknesses. The Individual Profile is particularly useful for one-on-one conferences with athletes.

Height Measurement

Equipment and materials needed:

- Measuring tape or marked area on wall.
- Device to place on the head of the athlete that forms a right angle with the wall.
- **Optional: [Dashr BioStation](#) for recording/entering data.**



Procedure:

1. Athlete must take shoes off.
2. Athlete must stand with heels, buttocks, back and head against the wall.
3. Place device on athlete's head so that a right angle is formed with the wall.
4. Measure to the nearest $\frac{1}{2}$ " and record height.

Causes for disqualification:

- a. Not having shoes off.
- b. Not having feet flat on the floor and buttocks against wall.

Body weight

Equipment and materials needed:

- Certified Scale
- **Optional: [Dashr Scale](#) and app for recording/entering data**



Procedure:

1. Athlete must weigh-in with only t-shirt, shorts, and socks (no shoes, sweats, or equipment).
2. Athlete should weigh prior to any activity to avoid fluctuations due to dehydration.
3. Round body weight to the nearest whole pound.

Causes for disqualification:

- a. Inappropriate dress.
- b. Attempting to increase body weight by attaching a weight to the body.

Wingspan

Equipment and materials needed:

- Tape to measure from fingertip to finger tip. Your middle fingers are used for measuring your reach because they are your longest fingers.
- **Optional: [Dashr BioStation](#) for electronically recording/entering data.**



Procedure:

1. Athlete should stand relaxed.
2. Stand against wall facing towards from the wall with arms extended out to the side.
3. Make sure feet and hips are next to the wall.
4. Athlete then extends arms and fingers as far as possible.

Key Point:

A longer reach is considered an advantage in sports like basketball and volleyball as well as many positions in football.

10 Yard Dash

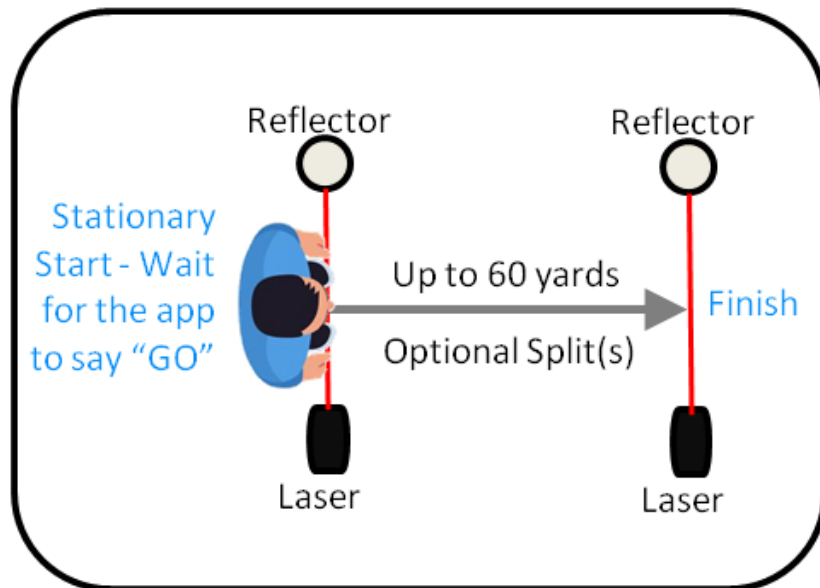
The 10 yd dash measures acceleration and speed. The number one physical attribute that determines athletic ability is running speed. A fast start and good acceleration are very important; being a step faster could be the difference between winning and losing.

Equipment & materials needed:

- Electronic timing system. We suggest the [Dashr](#) wireless electronic timer (requires 2 gates – see Dashr user manual for operation)
- Thirty or more yards on a wood basketball type floor (or track/grass/turf in good condition)

Procedure for 10 Yard Dash:

1. Athlete places one hand on the starting line but not in front of the starting line.
2. Athlete takes off and timing starts automatically when the hand leaves the laser beam. (NO rocking or rolling; must start from stationary position)
3. The time is recorded when the athlete breaks the beam at 10 (or 40) yards. (NO lunging or diving)
4. Time is recorded to the nearest 100th of a second.



My Coaching Tip: Without electronic timing the 10 yard time will not be accurate enough to record.

Pro-Agility Run

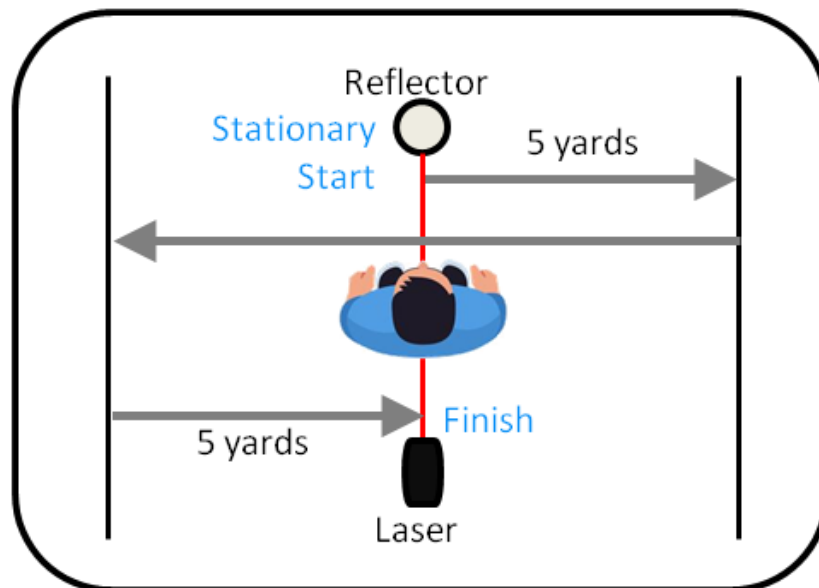
The Pro-Agility or 5-10-5, measures lateral agility. Agility refers to the ability to change directions rapidly while maintaining balance without the loss of speed. Record the best run. The test can be done with a standing start or a three-point start as long as everyone on the team does it the same way. **For this competition we will be using a 2-point start.** The athlete always runs to the right for five yards then returns running ten yards to the left before coming back right to the starting line. The total distance run is 20 yards. The Dashr system can measure this with a single timing gate. If hand held stopwatches are used record the average time from two coaches.

Equipment and materials needed:

- Electronic timing system. We suggest the [Dashr](#) wireless electronic timer (requires 1 gate - see Dashr user manual for operation)
- Forty feet or more on a wood basketball type floor (or track/grass/turf in good condition)

Procedure for Pro-Agility Run:

1. Start in Hit Position straddling center line.
2. The athlete always begins running to the right first.
3. Run five yards and **touches** the line with the right hand.
4. Return running ten yards to the left **touching** the line with the left hand.
5. Finish by running back through to the starting line where the time is recorded.



Causes for disqualification:

- a. Not touching the lines with the correct hand.
- b. Rocking/swinging at the start.
- c. No lunging or diving at the finish.

Broad Jump

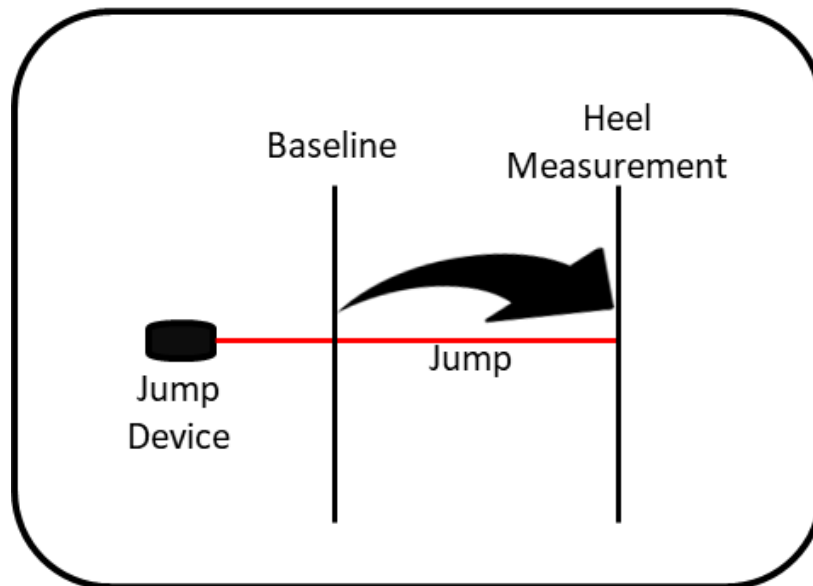
The Standing long jump, also called the Broad Jump, is a test of explosive leg power. It is one of the fitness tests in the NFL Combine and was also once an event at the Olympic Games.

Equipment and materials needed:

- Tape measure
- Twelve feet or more on a wood basketball type floor
- **Optional [Dashr Jump](#) system (see Dashr user manual for operation)**

Procedure for Broad Jump:

1. Athlete stands with toes on the line to jump from.
2. Athlete performs a countermovement and jumps straight out as far as they can.
3. The athlete must land on their feet and not fall to their buttocks.
4. Measure from the starting line to the back of the heel closest to the starting line.



Causes for disqualification:

- a. Jumping from in front of the starting line.
- b. Not "sticking" the landing.

Administer the Test and Collect Data

- 1. Set-up.** Make sure you have everything prepared for testing before the athletes arrive. Any equipment and operators are in place.
- 2. Warm up.** Allow the athletes a few warm-up trials on their own off to the side without being scored.
- 3. Test.** After anthropometric data is collected, have each athlete do the 10 yard Dash, Pro-Agility, and Broad Jump.
- 4. Announce scores.** After the athlete executes each test, announce the score right away. This gives immediate feedback. This will also motivate the athlete to give his or her best effort. If using Dashr timing equipment, they now have a [display](#) to show those results at the end of the run.
- 5. Record data.** Copy results down onto a spreadsheet or if you are using Dashr, make sure you have your [Rosters](#) set-up so you can check-in the athlete and have the results saved automatically.

If you are wanting to use the Epley Advantage Performance Index with your program, outside of the High school State Championship, you will need Dashr equipment and a software license. These can be found at www.epleyadvantage.com or you can contact Dashr directly at 844-44-DASHR or email at info@dashrsystems.com.

Submit Results for the Nebraska High School Performance Index State Championship.

1. Compile the required information for your school and athletes on the template spreadsheet provided (can download at www.epleyadvantage.com/eapichampionship)
2. Rename the file with your school's name and the date
3. Email the renamed file to EAPI@dashrsystems.com and the folks at Dashr will generate an EAPI for each of your athletes.
4. These EAPIs will be emailed back to you and a leaderboard of the top 100 performers in the state will be viewable live. (www.epleyadvantage.com/leaderboard)
5. Make sure you submit by March 31st, 2023 to be included in the '22-'23 Championships.

Please email EAPI@dashrsystems.com if you have any questions about this process.



Boyd Epley
Hall of Fame Strength Coach

Boyd and his former assistant Mike Arthur are responsible for many innovations that shaped strength coaching, strength equipment, and Performance Testing since 1969. They hosted the first meeting of the National Strength and Conditioning Association in 1978, were the First to transport lifting equipment to bowl games- 1980, First to have a National Strength Coach of the Year – 1980, First to have Electronic Timing - 1982, First to have a Performance Index to identify talent - 1985, the first Jammer - 1993, the first Half Rack - 1996, The first Transformer - 2002, first Push-Pull Machines - 2002, first Elite Form units in 2009, and first to celebrate a 50 year anniversary of a college strength and conditioning program -2019.

