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FRIENDS OF NVT

OFFICIAL NEWSLETTER OF INNEURACTIVE

INTRODUCTION

Welcome to the latest issue of the Friends of NVT Newsletter!

In this edition, we kick things off with a recap of the American Baseball Coaches Association (ABCA) Conference in Maryland, where Inneuractive made its public debut. Learn how we connected with coaches and showcased our groundbreaking technologies like the Zeus Lightboard and Hercules System, paving the way for NVT to revolutionize baseball performance.

Next, dive into the power of Zeus! Discover how this innovative lightboard breaks down multi-tasking into three actionable levels—multi-tasking, dual-tasking, and sequential processing. See how Zeus is transforming training sessions into measurable performance gains for athletes at all levels.

Finally, we round things out with a "how-to" on task overload using Marsden Balls. This step-by-step guide shows you how to build complexity, challenge athletes, and push them to their limits—all while keeping the experience fun and focused on improvement.

Whether you're a coach, athlete, or trainer, this issue is packed with tools, insights, and strategies to elevate performance through NVT.

For more resources, visit Inneuractive!

WHAT'S IN OUR LATEST ISSUE:

- Introduction
- ABCA Recap
- Harnessing the Lightning – Robert Hasselfeld
- "How To": Task Overload with Marsden Balls – Dr. Clark, Ph.D.
- Announcements
- Disclaimer

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Recap of the American Baseball Coaches Association Conference

Several members of the Friends of NVT newsletter and Inneuractive attended the American Baseball Coaches Association ("ABCA") conference in Maryland from January 2-4. The event brought together baseball and softball coaches working with athletes at all levels, from youth leagues to the MLB.

Inneuractive as a company has never conducted or been a part of any public marketing event so, this was effectively our coming out party, announcing what we have to the baseball world. Inneuractive had a presence at booth #101 in the vendor hall, where our team had an opportunity to meet a tremendous number of attendees and visit other booths. It was an intense three days of networking, with a consistent focus on discussing NeuroVisual Training ("NVT") as a tool for enhancing performance in baseball athletes. We also displayed our new technologies slated to hit the market it towards the end of Q1; Zeus Light Board & the Hercules System.

Key Takeaways

One major theme of the conference was vision training, exemplified by the popular, "see the pitch, hit the pitch" philosophy. Many vendors showcased tools and modalities focused on visual acuity and reaction time, such as the Brock String – a method familiar to many in the NVT and optometric communities.

Inneuractive's approach stood out by emphasizing the role of the brain in decision-making and how vision plays a crucial role in delivering high-quality information to the brain. While many attendees and vendors seemed satisfied with 20/20 vision as the gold standard, we highlighted the broader "eye-brain-body axis," and how NVT strengthens the connection to enhance baseball performance.

Numerous coaches returned to our booth for deeper discussions about the integration of brain function with vision training. This concept is foundational to our work and resonated with those seeking a competitive edge for their athletes.

Scientific Publications: A Highlight of Our Booth

We brought hard copies of three key peer-reviewed publications directly relevant to baseball performance. To our amazement, these materials were in high demand, with all copies gone by the end of the first day. Each day, we had to print additional copies to meet interest.

Our comprehensive publication portfolio, including a folder of 30 peer-reviewed papers from Inneuractive and another binder with twice that number from other researchers, was a standout feature of our booth. Many coaches and attendees appreciated the scientific evidence supporting NVT's role in enhancing baseball performance. This level of experimental support was unmatched by other vendors at the conference.

Networking & Collaboration Opportunities

We met several vendors offering vision or brain training solutions for performance enhancement. Some expressed interest in Inneuractive's approach and the integration of brain function into vision training. A few even complemented on our unique perspective and the complementary nature of our work.

These interactions opened doors to potential partnerships, and we're optimistic that some vendors may contribute to the Friends of NVT newsletter. Stay tuned for updates on these collaborations.
Closing Impressions

The ABCA conference revealed a growing interest in NVT as a critical frontier for sports performance enhancement. The momentum behind NVT is undeniable, and acceptance of our methods continues to grow. As we explored the vendor hall, it became clear that the market for physical performance enhancement methods and tools have reached a saturation point, signaling that we are at the pinnacle of the physical optimization growth curve. This reinforces our belief that we are entering a new era in athletic performance enhancement – one focused on measuring and training the brain. NVT is leading this transformation, defining the future of sports training.

Mark Your Calendar (Next Year, We're Local!)

The next ABCA conference is scheduled for January 8-11, 2026, in Columbus, Ohio. Our booth will be booth #901 for anyone anticipating attending. Visit www.abca.org for more details. We hope to see you there!

Harness the Lightning:
Zeus' Secret to Multi-Tasking Excellence

Zeus is an innovative NeuroVisual training light board combining cutting-edge technology with user-friendly software, and intuitive and scientifically validated button interface based off the Wayne Saccadic Fixator. Built by Blue Sun Systems, this system empowers athletes, professionals, and everyday users to elevate their cognitive and visual-motor skills through unique exercises designed by Inneuractive's NeuroVisual training staff.

One of the standout features of Zeus is its ability to train multi-tasking. However, not all multi-tasking is created equal. When we, at Inneuractive, consider multi-tasking we break it into three distinct categories: multi-tasking, dual-tasking, and sequential processing. Let's explore how Zeus transforms these training approaches into measurable performance gains.

Level 1: Multi-Tasking

Multi-tasking on Zeus involves simultaneously responding to multiple visual and cognitive stimuli. For example, users may be tasked with hitting red and green buttons in a systematic fashion (i.e., red button = hit with right hand / green button = hit with left hand) while verbally solving math problems or spelling words on the tachistoscope.

This trains the brain to process overlapping demands efficiently, a skill required for elite-level athletes managing real-time game dynamics. Over time, the practice enhances working memory, focus, and the ability to filter distractions. Another key skill it trains, is learning how to fail and quickly move on, making users more effective under pressure.

Level 2: Dual-Tasking

Dual-tasking exercises on Zeus are designed to challenge motor coordination and cognitive processing in tandem. A typical exercise that we use at Inneuractive is to have the athlete stand on a half Bosu ball while a coach is administering rhythmic stabilization ("RS"), which is a neuromuscular training technique used to apply alternating, multidirectional resistance to an athlete while encouraging the athlete to maintain a specific position/posture. Every push or pull during RS requires the brain to recalculate its last planned action to a new action thus amplifying the initial task to a dual-task. At the same time, they're focused on maintaining posture, the athlete needs to continue to hit buttons on the light board.

For older adults, this dual-tasking exercise can help reduce fall risk. For athletes, this exercise can enhance their ability to maintain situational awareness, proprioception, and more while performing complex physical tasks. By bridging the gap between cognitive and physical demands, Zeus fosters comprehensive development.

Level 3: Sequential Processing

Sequential processing drills focus on training the brain to execute tasks in a deliberate, ordered manner. One of our favorite exercises on Zeus combines two Inneuractive products: the Zeus light board and Marsden Balls. During the drill, the user engages with the light board by hitting buttons in a specific manner. Three button colors – red, blue, and green – are randomly displayed on the board. A coach or trainer is positioned off to the side and behind the athlete with a pack of Marsden Balls.

As the athlete begins hitting multi-color buttons, when they see blue, they must:

1. Hit the blue button.
2. Pivot toward the coach to catch a Marsden Ball.
3. Call out the shape or number and color of the ball as it travels through the air (e.g., “red circle!”).
4. Catch the ball using the appropriate hand: red = right hand, blue = both hands, green = left hand.
5. Pivot back to the board to continue hitting red and green buttons until they see the next blue button.

This sequence ensures each step is executed in a specific, predetermined order. If the athlete speeds up, skips a step, or fails to follow the sequence, their performance diminishes. Such errors can lead to task overload and, ultimately, failure. Practicing on the light board to perform sequential processing activities leads to better on field performance by improving transitions between tasks.

By training the brain to prioritize information, recognize patterns, and execute precise actions under time constraints, this exercise builds mental discipline and enhances decision-making. Sequential processing is especially valuable for sports like basketball or soccer, where athletes must rapidly assess evolving scenarios and respond with calculated moves. With the dynamic button interface of Zeus and the addition of Marsden Balls, users can push their cognitive and physical limits to new heights.

Conclusion

Zeus’s versatile functionality makes it an essential tool for any organization looking to enhance their athletes’ cognitive and physical performance. By understanding the subcategories of multi-tasking and their key differentiators, you as a coach can administer more focused training. By incorporating mutli-tasking, dual-tasking, and sequential processing into training regimens, users can develop sharper focus, better decision-making, and enhanced reaction times.

This innovative device eliminates the gap between mental agility and physical capabilities, delivering transformative results.

Multitasking and Task Overload with NVT Using Marsden Balls

Many sports performance coaches are quick to claim their expertise in training athletes for multi-tasking and task overload. Often this involves endurance, strength, quickness, and stacking those conditioning activities to fatigue the athlete and load the athlete with tasks. While that has a place in strength and conditioning, NVT trainees are familiar with multi-tasking, dual tasking, and sequential processing of tasks.

We’ve talked about these subcategories of multi-tasking previously in I4V7. In this issue, we talk about stacking tasks with the goal to task overload the athlete. This overload can be done in many ways. We have used multi-Marsden ball pitch and catch as a task overload activity as part of our NVT training. To follow is a How To on stacking tasks for task overload using Marsden Balls pitch and catch.

This is one example of how a stacked exercise can be used to progress an athlete to failure. There are many methods that can be combined to achieve the same task. Please note that each individual task is performed in isolation to a proficiency level and then combined, one or two at a time, to generate complexity and difficulty.

We’ll start this How To with the task overload condition. Please recall, this can take multiple sessions to get an athlete or client to this stage.

Here's an example of a multi-tasking drill using the Marsden Balls and pitch and catch. An athlete standing on a half-bosu ball. He/she is listening to words being called out and must remember groups of 10 words at a time. He/she is also catching Marsden Balls with the following instructions: red balls are caught with the right hand, green balls are caught with the left hand, blue balls are caught with both hands, and all other colors caught with either hand. It's important to note that our brand of Marsden Balls can be solid color, have alphanumerics, or shapes on them.

The athlete is instructed to call out the alphanumeric and the shapes while the ball is traveling through the air. PLUS, we will occasionally have 2-3 NVT trainers, parents, or siblings throwing balls at the athlete sometimes in sequence and sometimes simultaneously. The athlete is told that if more than one ball is coming at them at the same time, they are to prioritize which ball they catch. The prioritization scheme we use is alphanumerics first, shapes second, and solid-colored balls third. Please see I1V2 for more details on the Marsden Ball methods.

Note how many tasks are in this drill. This would be the culmination of building the task overload from individual drills. Here are the tasks the athlete is doing all at the same time:

- Balancing on the half-Bosu.
- Actively memorizing the group of 10 memory words.
- Catching Marsden Balls based on the ruleset.
- Calling out what content is on the Marsden Balls flying through the air.
- Prioritizing the various balls and remembering that rule.

Each task can and should be trained in isolation so that the athlete is familiar and comfortable with each task, and he/she should know how it feels to be successful with the individual tasks. Next, you layer on the task one by one and observe the increased difficulty. Also, observe if and how your client fails and adapts to the increased tasks. We strive for fun, but hard. We want the person to be successful but challenged. It is okay to drop a ball or forget a word, but not okay to fall off the half-bosu. They must prioritize their tasks.

As the NVT specialist, you are to note what tasks they continue with and what tasks they do poorly. Do they not recall words? Do they drop all the balls? Do they not prioritize? Do they stop communicating the alphanumerics or shapes? Do they lose their balance more often? What they continue to do well they are comfortable with. What they choose to not do or do poorly is what they are less comfortable with and can be trained later in isolation. While they will see that this is difficult, they often are pleasantly surprised at how many complex tasks they can do with NVT. Also, they will see the further benefits of NVT training in getting better at complex tasks that may be occurring in an overload like situation. If/when this transfers to their craft, they will see performance enhancement and ability to perform better under pressure.

Task overload is an activity that can generate frustration. Remember you will have worked up to this by adding tasks one or two at a time. Please build a relationship concerning their performance and multitasking activity. Also, the goal is not to do this every session, every day. The goal is to get the client comfortable with task overload in your sessions so that they can be comfortable with task overload in the heat of competition.

Everyone has a task overload limit where they fail. Most of our clients enjoy pitch and catch even if task overloaded. Hard activities such as the Marsden Ball activity does not mean it's not enjoyable. Let your client know that it's okay to fail and its even okay to have fun doing it.

Announcements

Some of our upcoming issues will have articles about the Hercules system: https://www.youtube.com/watch?v=Ibu5pBsduY0. Check out the video to learn more and to be more informed about Hercules' reaction time and split attention exercises.

We encourage our Friends of NeuroVisual Training community to engage with these enriching resources. Your commitment to staying updated fuels the advancement of our field, and for that, we are sincerely appreciative.