MWAB membership outline

1. **Feel**
   * sensory pathways
   * proprioception, interoception, exteroception
   * sensory warm up
   * providing feedback via props
   * types of proprioception- mechano, noci, baro
2. **See** (vision drills)
   * eye position reflexes
   * inhibiting reflex to pursue motion- finger wiggle, look to opposite side
   * fun ways to practice convergence: ball bouncing, partner, brock string, cup catching, balloon toss
   * smooth pursuits, VOR, VOR c, near/far (accommodation) and opposed gaze
   * saccades
   * (17) types of visual skills:
     + PERCEPTION
     + visual discrimination
     + visual spatial relations
     + visual closure
     + visual memory
     + sequential memory
     + figure ground
     + form constancy
     + hand/eye, foot/eye coordination
     + TRACKING
     + fixation
     + central peripheral integration
     + pursuits
     + saccades
     + inhibition of reflexes
     + TEAMING  
       convergence
     + divergence
     + FOCUSING
     + accommodation such as near/far
3. **Balance/orient** (vestibular)
   * what is vestibular system and what does it sense/provide
   * training balance must include head and eye movement and most balance training is actually stability training
   * how this system informs and impacts everything else such as mobility, strength, confidence
   * vestibulo-spinal tract, vestibulo ocular and collic

1. **Breathe/fuel**
   * oxygen and glucose- back breathing, ladder breathing, diaphragm retraining, band breathing, using “lung expander” and resistance training for respiration muscles, exhaling into a balloon training expiratory muscles, counting, learning more about intra abdominal pressure
   * anatomy of breath
   * HRV, breathing differences between PSN and SNS
2. **Move**
   * clarify
     + - contractile maps
       - mobility isolations
       - adding load/bands/sandbags etc for more proprioception/sensation and hence more movement
       - tracing labyrinth with laser (motor control, accuracy for cerebellum, vestibulo-colic reflex, saccades)
   * shape (inoculate)
   * coordinate (cerebellum): with rhythm challenges, speed challenges, dual tasking, responsiveness, coordination charts requiring visuomotor skills
   * load
   * integrate
   * innervate (neuromechanics/nerve glides)
   * ground- foot strength, shoes, earthing

6. **Assess**

7. **Cue**

* + internal vs external cues
  + props aiding motor learning- how do we learn motor skills. learning or simply following?
  + goals- jobs, external cues
  + deconstruct, regress to progress
  + motor learning by assessing sensory input vestibular and visual

8. **Adapt**

* + said principle
  + needing novelty or else diminishing returns
  + adapting to the positions, speeds, environments etc we train in

1. **Play**
   * invent,
   * create,
   * intuit
   * why play is how we learn and retain
   * why fun and joy are so valuable)

13. **Progress**

How can we progress and regress; shape, load, speed, coordination, memory. typically we think of challenging rather narrowly as in load and cardiovascular requirements but there are other ways to add challenge: coordination, dual/multi tasking, cognitive load/memory, visual and vestibular involvement, closer to the brain more stimulation.

14. **Go outside**

* + how nature heals
  + circadian rhythm
  + light exposure
  + earthing

15. **Integrate**

* + drill stacking for greater impact on nervous system or for a gateway in
  + integration
  + incorporate- stack your life, change what you can
  + sleep, eat and hydrate

OTHER TOPICS EXPLORE

-ipsilateral vs bilateral training- how we take in sensory information pathways

-opposing joints, neuronal limb coupling

-alignment- functional or aesthetic?

-arthrokinetic reflex

-inhibiting reflexes as in one to pursue motion- finger wiggle, look to opposite side (inhibit reflex to look to movement or sound)

-eye position reflexes

-neuromechanics- nerve glides

-tracing labyrinth with laser (accuracy for cerebellum, vestibulo colic reflex)

-diminishing returns and novelty

* cranial nerves
* spinal nerves
* the brain knows nerve pathways and patterns not muscles
* PNS vs CNS
* ways to down-regulate and what yoga is best at
* yogas blind spots
* threat bucket
* recoil
* fast twitch and slow twitch
* motor learning
* how speed impacts mobility and training at varying speeds
* what movements/breath down regulates SNS and increases PNS what arouses SNS. In an increasingly stressful world don’t we need more down regulation? what practices deliver this but promise more (power yoga)

- cognitive load of learning new skills and of remembering sequences

* how learning can be “threatening”
* threat bucket
* elastic recoil