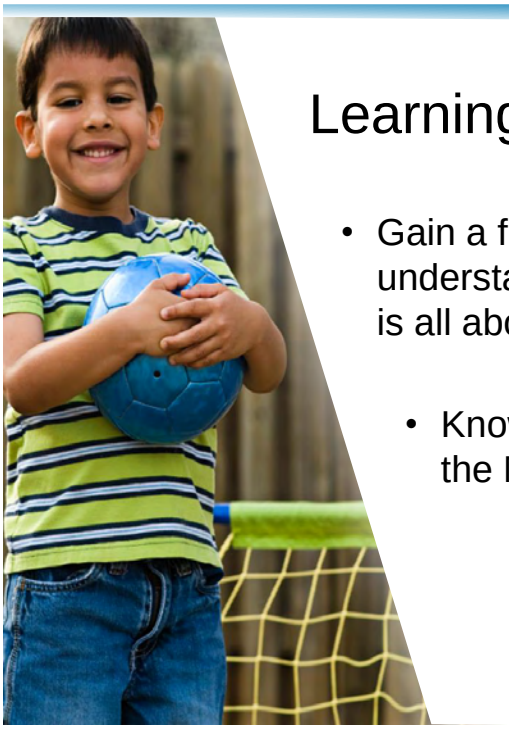
inTime Master Class

inTime Overview

an introduction to the concept, the product and the class

THE LISTENING PROGRAM by ADVANCED BRAIN TECHNOLOGIES



Learning Objectives

- Gain a foundational understanding of what inTime is all about
  - Know the intention behind the Master Class

The Concept

Combined through music and activity, rhythm and sound frequency have the capacity to bring about change.

The Product

inTime is an organic compilation of original compositions, based on a blend of world music with diverse instrumentation, which accents the power of rhythm and sound frequencies.

- Personalized listening training
- Activities using body, drum, and voice
- inTime Drum & Guidebook

The Method

inTime is practiced on a regular basis, 5 days per week. The duration of daily practice and of the overall program depends upon the needs and goals of the listener.

Agenda

inTime Master Class

Sound and Time

an exploration of sound as an event in time

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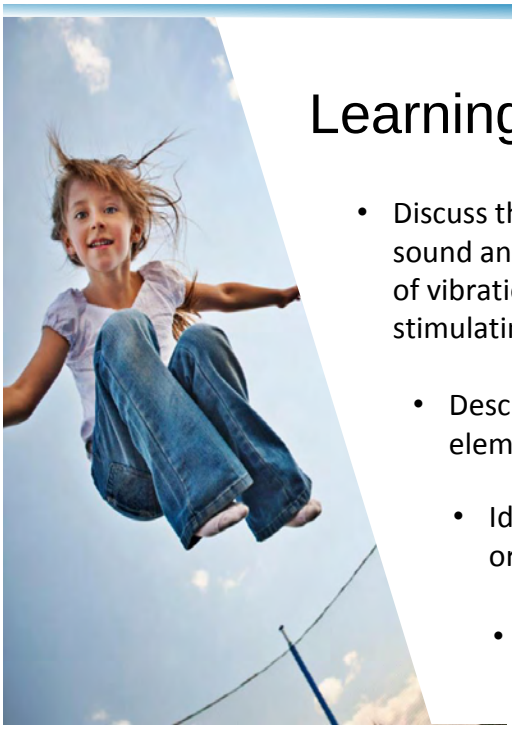


Learning Objectives

- Discuss the relationship between sound and time, from initial onset of vibration to neural impulses stimulating perception
  - Describe how time influences sonic elements
    - Identify ways in which sound is organized in time within music
      - Begin to consider music as a metaphor for life

"What is time, then? If nobody asks me, I know; if I have to explain it to someone who has asked me I do not know."

-St. Augustine (354-430)
Christian Philosopher

Sound is energy.

"We all have our own beliefs, relationships and understanding of time. Yet one thing is true and cannot be debated – sound happens in time."

-Dominic Paul
Musician

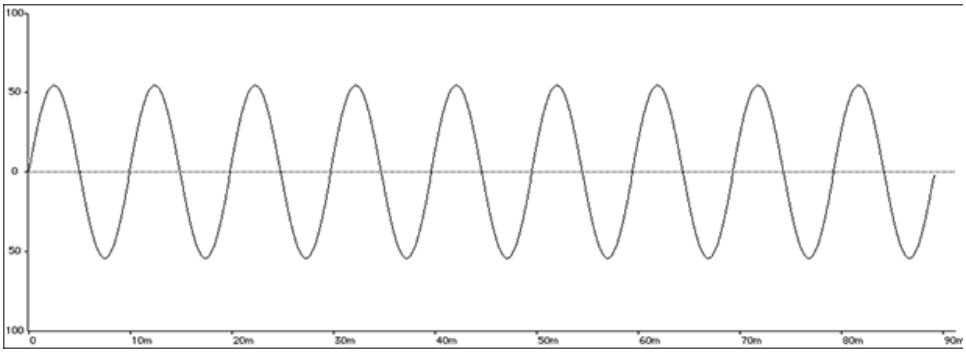
It all starts with movement and pattern.

The effect of the vibrations on us depends upon the frequency and strength of their recurrence.

Science of Sound

Source: http://science.howstuffworks.com

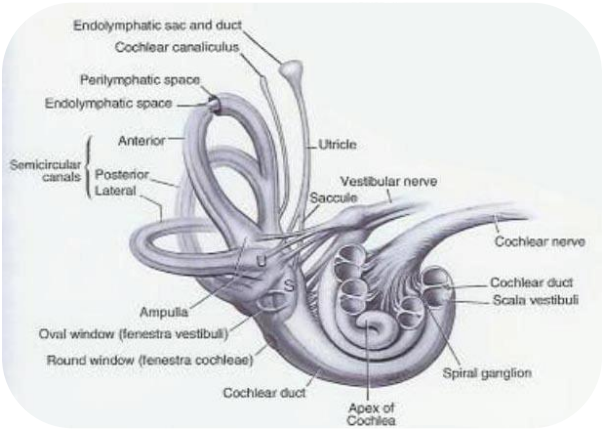
A vibration must be at least **.013** seconds in duration if it is to be heard as a pitch.



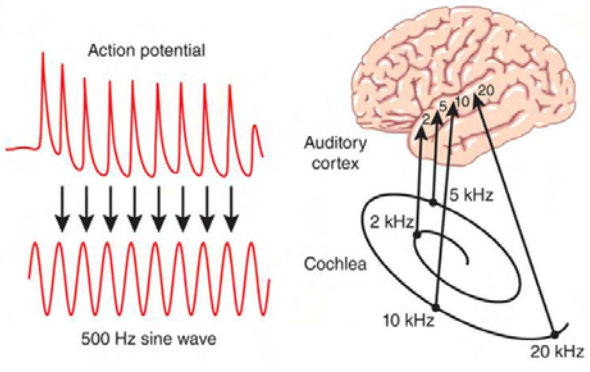
Understanding Sound Waves

Source: http://science.howstuffworks.com/29843-understanding-sound-waves-video.htm

The frequency of the vibration affects how it is delivered to the cochlea and how it affects the Organ of Corti.

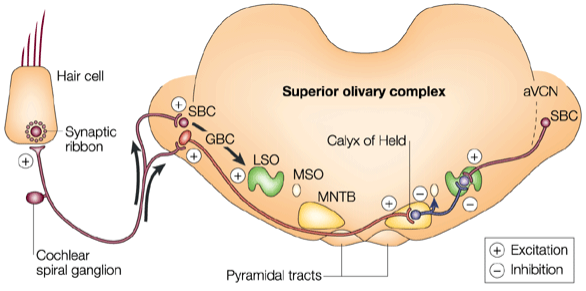


Temporal coding becomes a way in which sound frequency is directly represented in the neural code.



Source: Graeme M Clark Nature Medicine 19, 1236–1239 (2013)d oi:10.1038/nm.3340 Published online 07 October 2013

Progressing up into the ascending neural pathway, the temporal patterning of neural impulses becomes important early on for the detection of the spatiality of sound.



Nature Reviews | Neuroscience

Source: http://www.nature.com/nrn/journal/v3/n1/box/nrn705_BX2.html

Efficiency of timing within all the direct and indirect pathways and connections of the neuroauditory system, both ascending and descending, contributes to efficient, timely responses.

Time influences the other elements of sound - frequency, amplitude, space, and, yes – time.

- Pitch
- Resonance
- Loudness
- Spatiality
- Entrainment

Sound in Time

Source: Justin Boyd : Sound and Time, Department Chair of Sculpture and Integrated Media at Southwest School of Art, San Antonio, Texas

In everyday life, who is orchestrating your sound experience in time and what is that doing for you?

"Time is the very essence of music and music experience. Each piece of music is an act of time corresponding to a temporal organization, a tonal flow——becoming——music.

-Nils Wallin
Biomusicologist and author

Music Provides an Order to Sound

Music is organized in time through

- Meter — The time signature of a measure of music; or the units of time within which rhythms occur; often used synonymously with cycle. Examples will be given later
- Cycle — Beginning at and returning to the '1" beat
- Rhythm — Repeated pattern or recurrent sequence of movement or sound; measured recurrence; measured flow
- Tempo — Speed or pace
- Pulse — The steady “beat”; the foundation; home;

What do you (or your client) listen to?

What can you do about it?

Connect or reconnect with patterns and movement through music and activity.

- Listen
- Engage

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Rhythm in Our Lives

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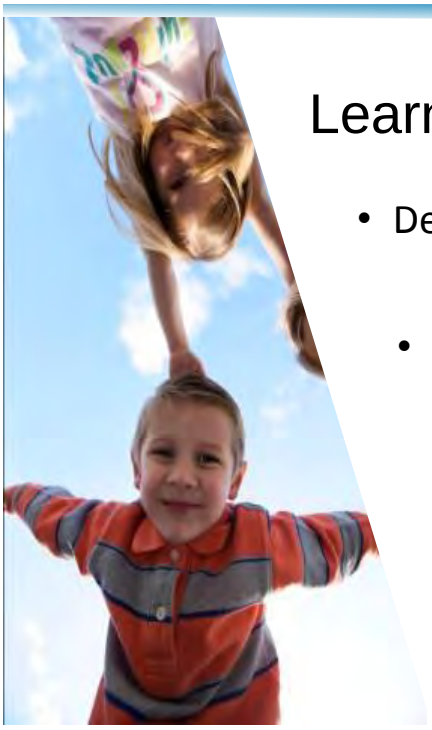


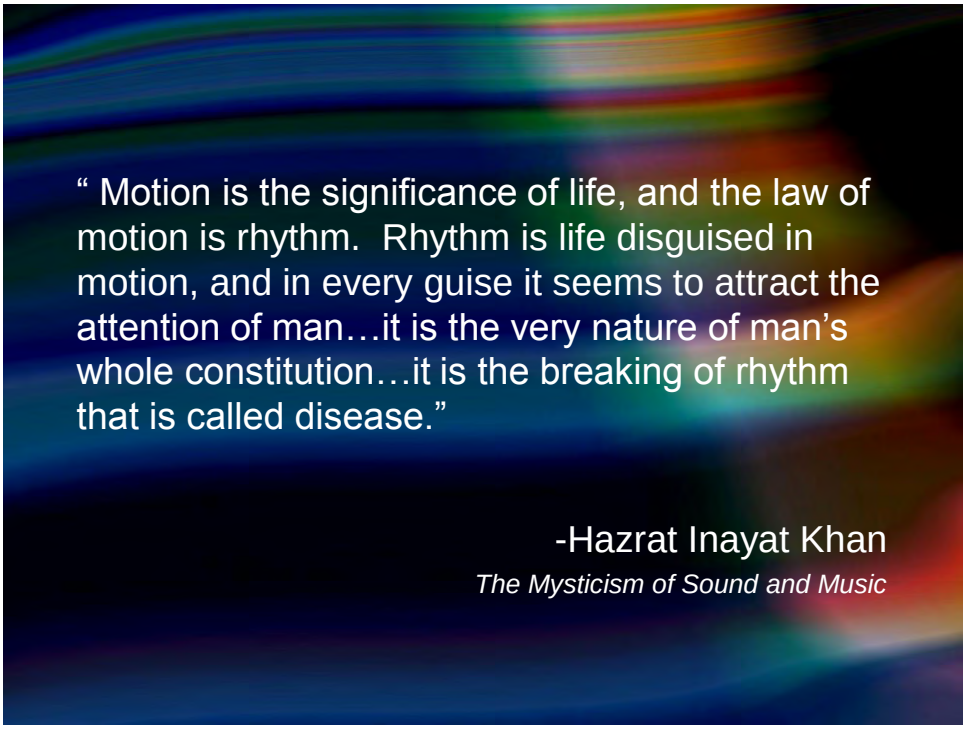
Learning Objectives

- Define rhythm
- Describe rhythm's role in music
- Recognize rhythm's broad influence

Rhythm is said to be an innate sense,
but is it readily accessible
and working for us?

Rhythm

derived from the Greek word *rhythmos* – recurring motion; flow



"the law of motion" = rhythm

the principle of synchrony = entrainment

"Rhythm is the primordial musical factor, deep-rooted and primitive."

-Charles W. Hughes

The Human Side of Music

"It is rhythm that allows sound to become music."

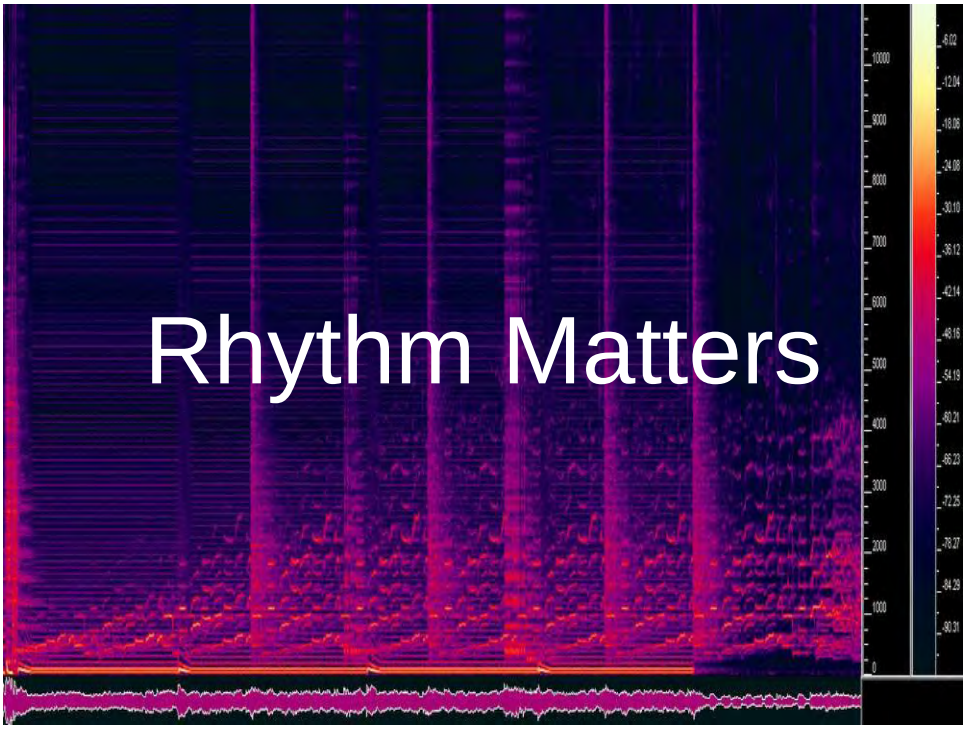
-Barbara Crowe
Music Therapist and Author

"Rhythm is different patterns in relation to the pulse."

-Nacho Arimany
inTime Composer, Instrumentalist, Producer

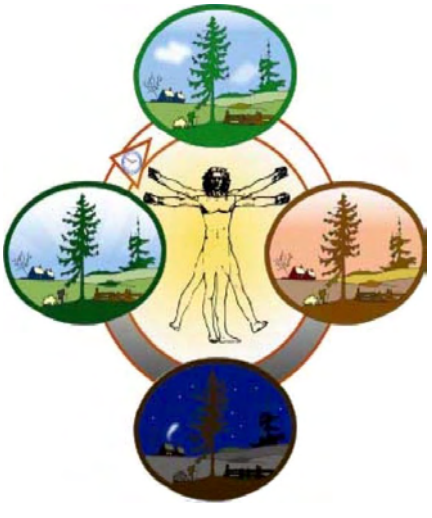
Photo Credit: Daniel Patinga

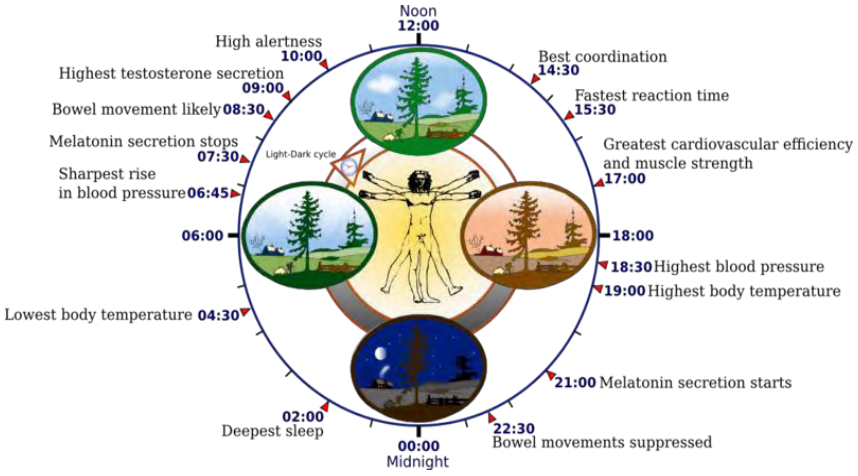
Pulse, or the beat, is foundational to the recurrence of pattern(s) and to flow.



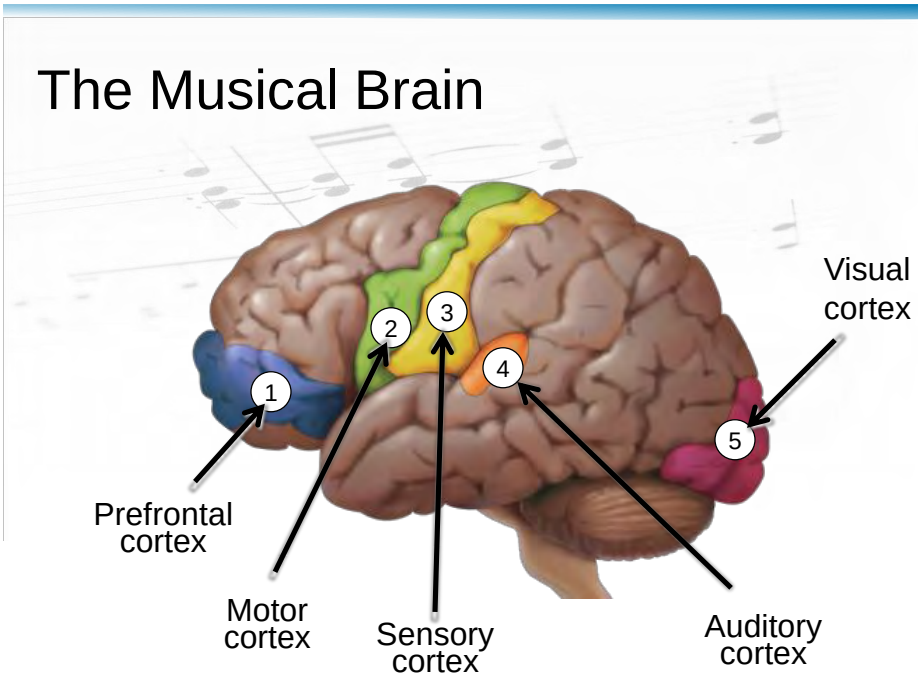
Chronobiology

the field of biology that examines rhythms in biological processes



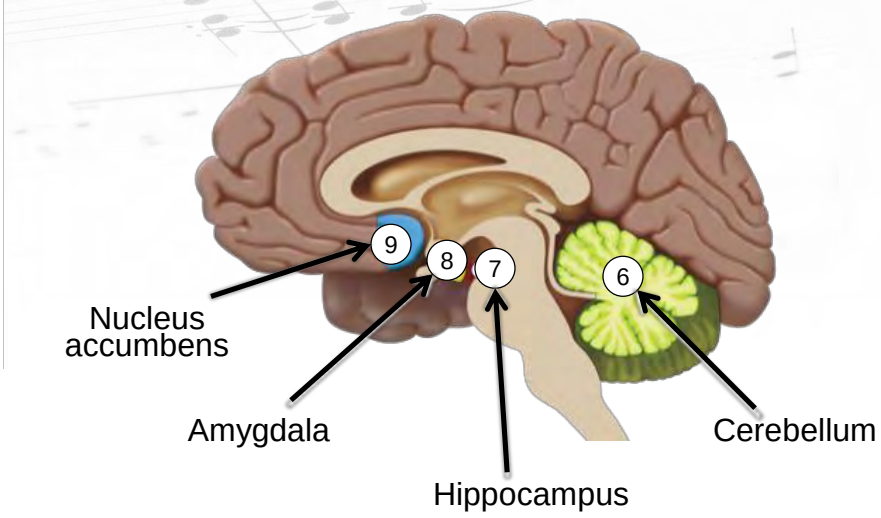


The Musical Brain



Source: D.J. Levitin and A.K. Tirovolas/Annals of the New York Academy of Sciences 2009; Image: Charles Floyd.

The Musical Brain



Source: D.J. Levitin and A.K. Tirovolas/Annals of the New York Academy of Sciences 2009; Image: Charles Floyd.

Rhythm

- is founded on the pulse
- is always with us and around us
- brings order/organization to sound and movement in time
- entrains
- is fundamental to the brain's most pervasively activating source of stimulation – music

"Science is telling us what
ancient peoples knew all along –

LIFE IS RHYTHM"

-Layne Redmond

Drummer, Author, *When Drummers Were Women*

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The Beat Goes On

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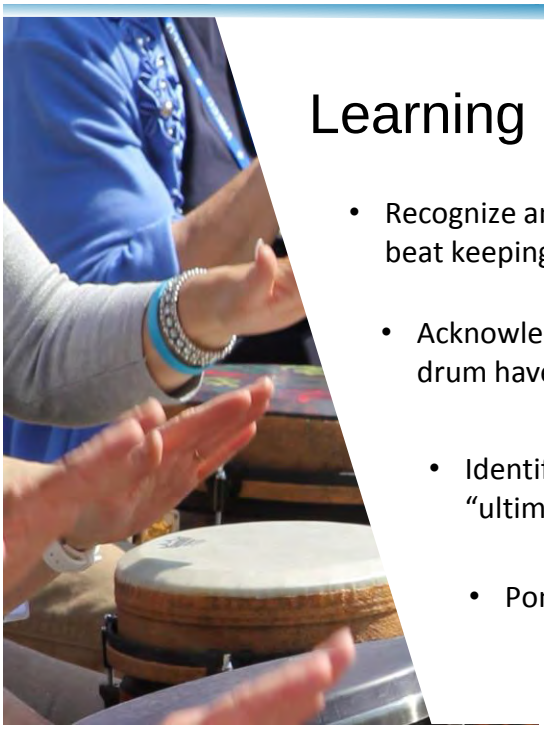


Learning Objectives

- Recognize an evolution of human beat keeping
- Acknowledge that drumming and the drum have stood the test of time
- Identify the human brain as the "ultimate rhythm instrument"
- Ponder – do you need to drum?

"There is a need to drum."

-Mickey Hart

Drummer, scholar, author

35,000
years ago

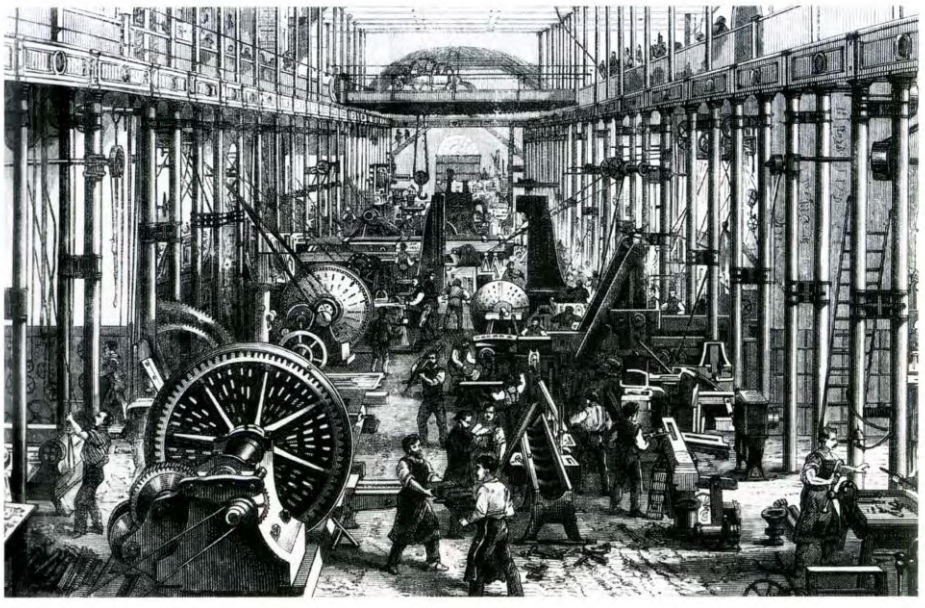
idiophones

8000 BC

membranophones

“We have always had the drum.”

1665 entrainment



Mid 1700s – The rhythm of machines

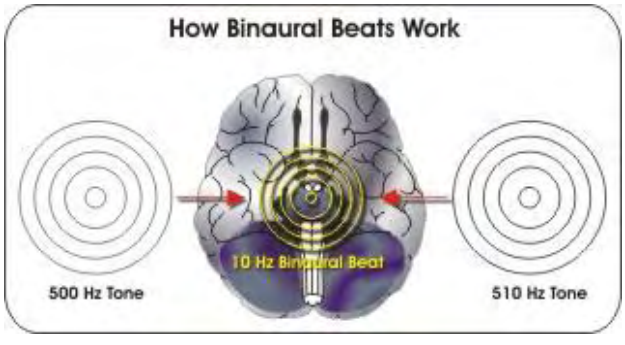
Mid-late 1800 – sound recording and reproduction

1929 – beginning of brainwave discoveries

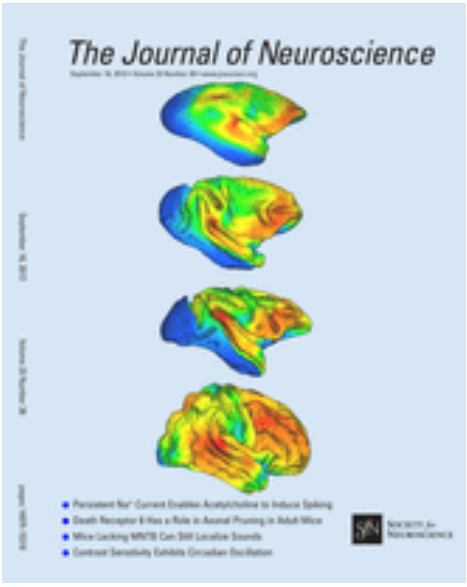
1959 – auditory brainwave entrainment

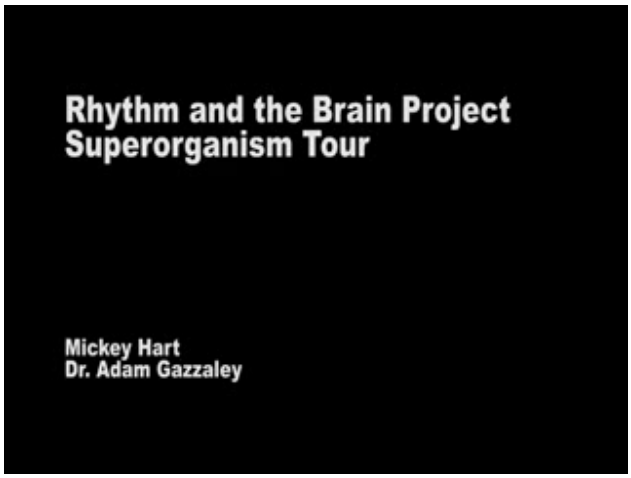
SCIENTIFIC AMERICAN MIND

THOUGHT • IDEAS • BRAIN SCIENCE



October 1973 "Auditory Beats in the Brain"


The Journal of Neuroscience


Rhythm and the Brain Project
Superorganism Tour
Mickey Hart
Dr. Adam Gazzaley

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Cultural Influences for an Intercultural Groove

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Learning Objectives

- Explain inTime as world music
- Define “intercultural”
- Identify the sound and feel of West African, Middle Eastern, Flamenco and Afro-Cuban influences as examples of rhythmic styles that are blended for inTime

"The world needs both the enriching effect of the preservation of its musical heritage and the stimulating effect of new innovations."

- Matthew Montfort
Musician, author

"Cultures in Dialogue" - the intercultural polyrhythmia of inTime


West African


Middle Eastern

Flamenco

Afro-Cuban

"Rhythm is a cross-cultural phemenon that is a universal characteristic of all music."

- Leslie Bunt, PhD
Music therapist, professor, researcher

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Meter

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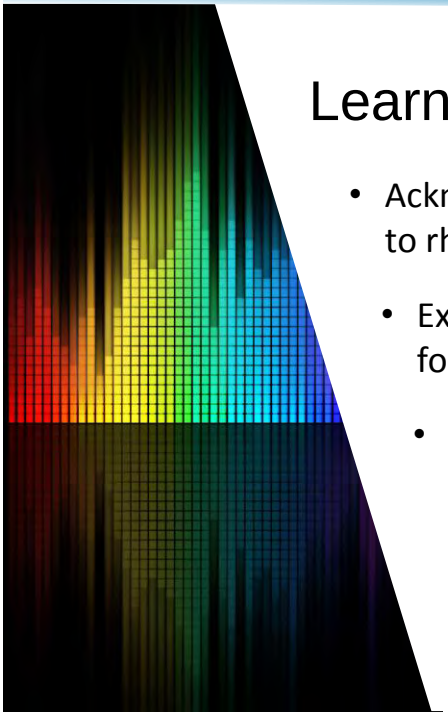


Learning Objectives

- Acknowledge meter as fundamental to rhythm perception
- Expand the definition of meter for application to daily life
- Tune into time through a beginning level of metric awareness
- Appreciate the relationship between meter and rhythm in the music of inTime

The Worst One Yet, Josh Lewis and Carley Allen

Module 4.1, inTime, Nacho Arimany

"Rhythm organizes time…. The structure of rhythm communicates a great deal about the actual, comprehensive musical meaning of a composition…The study of rhythm perception traditionally uses metric components as fundamental events…."

-Michael Thaut, PhD

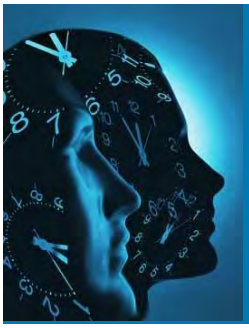
Professor, researcher, music therapist, author

"Meter is a musically specific instance of our more general perceptual facility of temporal attunement or entrainment."

-Justin London, PhD

Professor, researcher, author, musician

Musical meter and the time in our lives



Time doesn’t change; what goes on in it does!

Tuning into Time

2 of 4

4/4 time

1 2 3 4

3 of 4

4/4 time

1 2 3 4

4 of 4

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Music Through the Orchestration of Rhythms in Time

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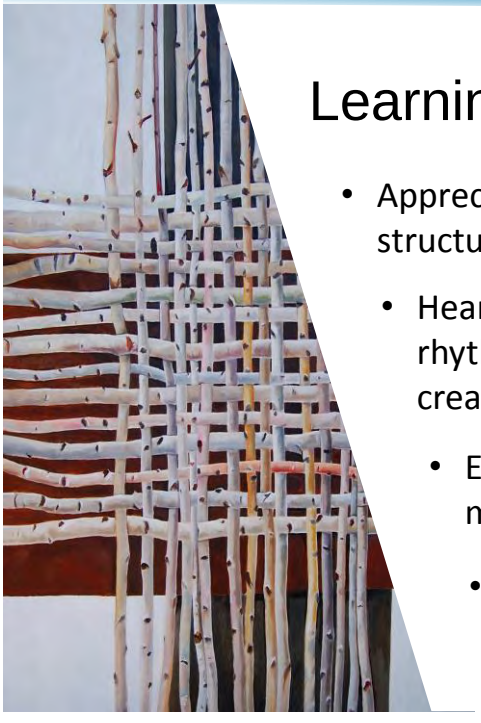


Learning Objectives

- Appreciate the polyrhythmic structure of inTime
  - Hear and feel how percussive rhythms can be orchestrated to create music
    - Engage in polyrhythmic music-making
      - Recognize and follow specific rhythms within polyrhythms

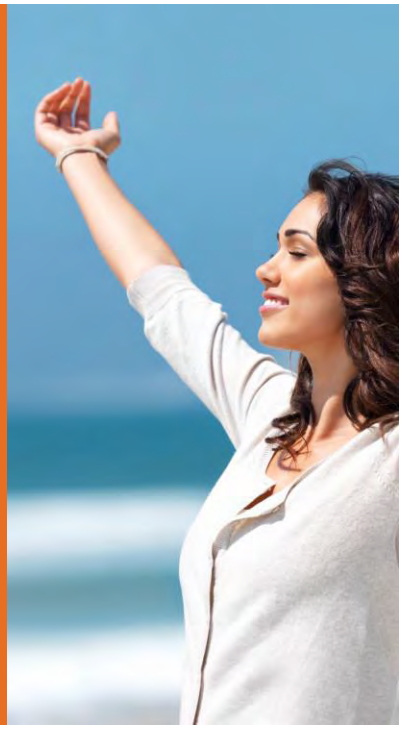
Orchestrated rhythms – music created through percussive polyrhythms

Listen.

Engage.

Keep the beat.

Find a rhythm.



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Research and Rhythm

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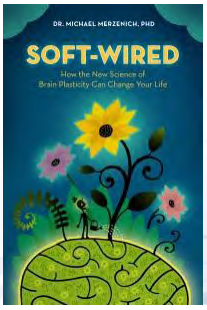
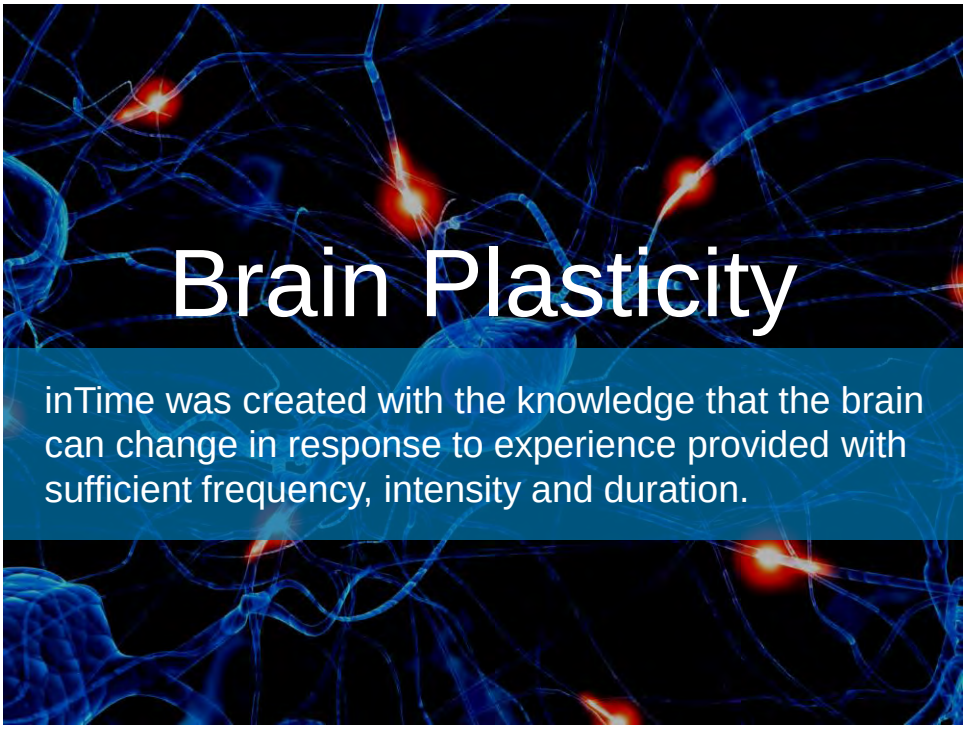
Learning Objectives

- Name 5 areas of neuroscience research upon which inTime is based
- Describe the inTime preliminary clinical trial and findings to date



Brain Plasticity
"The brain's machinery is being continuously rewired and functionally revised, substantially under your control, throughout the course of your natural life."

-Michael Merzenich, MD, PhD
Neuroscientist, author,
Co-founder, Scientific Learning and Posit Science



Brain Plasticity

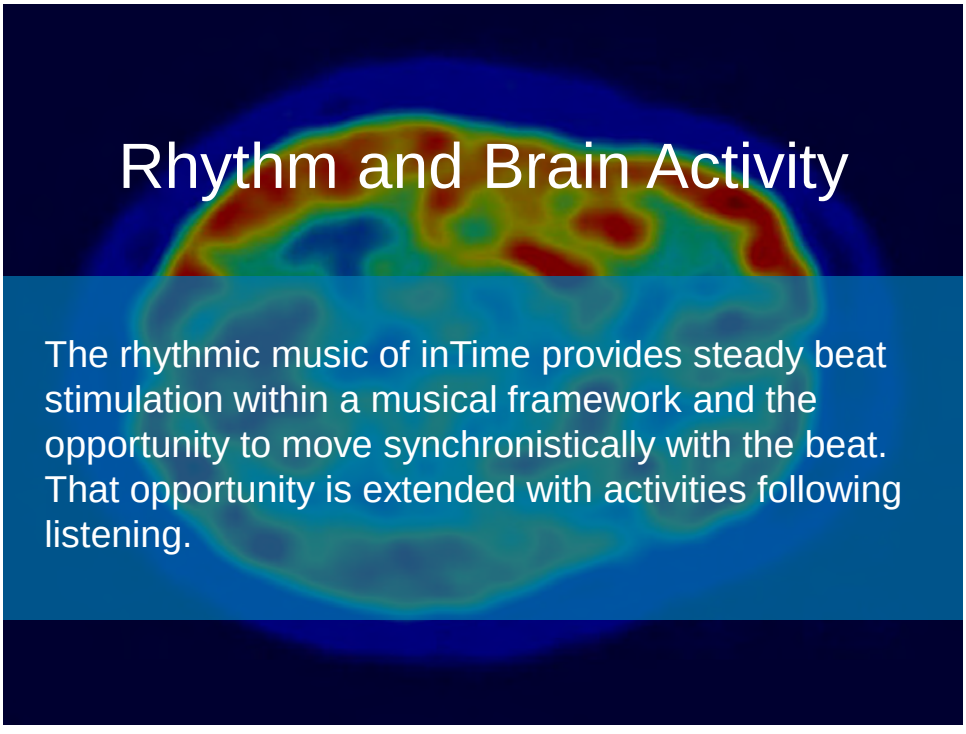
- The axons and dendrites of nerve cells physically change in response to training.
- Music training induces structural and functional brain changes
  - Gaser and Schlaug, 2003
  - Lappe, Herholz, Trainor and Pantev, 2008
  - Hyde, Lerch, Norton, Fogeard, Winner, Evans and Schlaug, 2009
  - Herdener, Esposito, diSalle, Boller, Hilti, Habermeyer, Schelfier, Wetzel, Selfritz and Catispan-Ludewig, 2010
  - Parbery-Clark, Anderson, Hittner and Kraus, 2010
  - Steele, Bailey, Zatorre and Penhune, 2013
  - Skoe and Kraus, 2013

Brain Plasticity

- Modulation of mood contributes to positive brain change (VanVleet, TM and Degutis, JM 2012).
- Modification of cortical inputs leads to synaptic changes which are related to improved sensory perception and enhanced behavioral performance (Froemke, et al , 2013).

Rhythm and Brain Activity
"Musical training with a heavy emphasis on synchronization of movement to musical beats may improve auditory neural synchrony."

-Adam Tierney, PhD and Nina Kraus, PhD
Neuroscientists

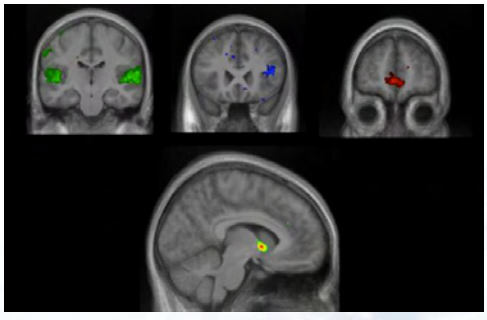


Rhythm and Brain Activity

The brain may respond to a beat when the body is not moving at all (Iversen and Patel, 2008), suggesting an internal sense of rhythm.

Beat perception is a complex brain function involving precise communication in time between auditory and motor planning regions of the cortex, even in the absence of movement (Iversen and Patel, 2013).

Listening to musical rhythms recruits various motor regions of the brain (Chen et al, 2008), some without action.



"Mental puzzles make music fun."

-Valorie Salimpoor, PhD and Robert Zatorre, PhD
Neuroscientists

inTime was built pattern upon pattern as the polyrhythmic structures for each module were created.

Music and Rhythmic Movement
"One of the most curious effects of music is that it compels us to move in synchrony with its beat."

-Marcel Zentner, PhD

Music and Rhythmic Movement

The natural connection between music and rhythmic movement is the core of inTime.

Music and Rhythmic Movement
"Rhythmic pulses are a recurrent element in our extramusical life."

-Marcel Zentner, PhD

Music-Rhythm-Emotion

The connection starts early and is with us for our lives.

Preliminary Clinical Trial: Effectiveness of inTime

PRIMARY AIM OF TRIAL:
Examine the effects of Advanced Brain Technologies inTime on children and adults with a wide range of abilities.

Investigate immediate and short-term gains achieved listening to one percussion period of the recommended protocol.

Preliminary Clinical Trial: Effectiveness of inTime

STUDY DESCRIPTION:
Listening to forty 9-minute sessions of percussion based music through headphones, twice daily, five days per week over the course of four continuous weeks.

Preliminary Clinical Trial: Effectiveness of inTime

INCLUSION CRITERIA:
Ages 3-adult with normal binaural hearing using headphones approved for The Listening Program.

Preliminary Clinical Trial: Effectiveness of inTime

DATA COLLECTION:
Participants or their parents (if a minor child) completed the Listening Checklist before and after the study and the Observations Checklist at the end of every fifth day of listening.

At the end of each listening session they also selected how they or their child (if the listener) were feeling in terms of mood and arousal level based on the Circumplex Model of Affect.

Preliminary Clinical Trial: Effectiveness of inTime

DISCUSSION:
Participants from the United States, Canada, United Kingdom, Australia, and Mexico registered for the study.

58 children (3 + years) & adults (to age 90) have completed the study as of January 20, 2014.

Preliminary Clinical Trial: Effectiveness of inTime

DIAGNOSIS:
Mild cognitive impairment, dementia, alzheimer's disease, ADHD, SPD, APD, hyperacousis, autism, anxiety, depression, TBI, stroke, learning disabilities, dyslexia, coordination disorder, developmental delay, dyspraxia, receptive/expressive language disorder, aging issues, and neuro typical.

Preliminary Clinical Trial: Effectiveness of inTime

REPORTED BENEFITS:
Data still needs to be analyzed; reports thus far are subjective.

Participants have commonly reported:

- mood elevation
- reduced depression symptoms
- better sense of rhythm
- more focused
- increased energy
- improved speech and language
- improved timing
- less stressed

Preliminary Clinical Trial: Effectiveness of inTime

REPORTED BENEFITS:
Most reported they wanted more daily listening and were disappointed when the trial ended, very much wanting to continue the daily listening practice.

One young child on the autism spectrum reported being uncomfortable with the music and discontinued listening. Two older adults indicated this type of music was not their preference, and that they preferred the classical music of The Listening Program. These were the only unfavorable responses reported.

Preliminary Clinical Trial: Effectiveness of inTime

These results are encouraging given only 25% of the recommended protocol was completed, and without the activity component.
This research is still in progress.

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Measuring Change

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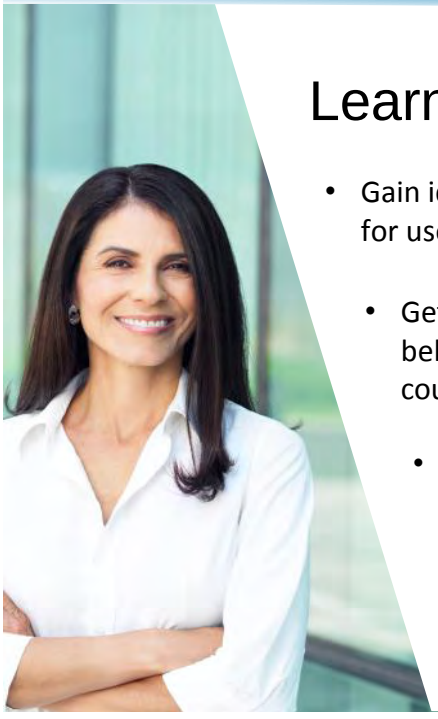


Learning Objectives

- Gain ideas of how to collect initial data for use with inTime
- Get ideas of how to monitor behavior/performance through the course of inTime
- Apply monitoring and assessment strategies used with TLP to inTime
- Consider new developments for measuring change

"It is not a matter of building the home base, but returning to it, which is a lot easier to do."

-Rick Hanson, PhD
Neuropsychologist
Author, *Buddha's Brain: The Practical Neuroscience of Happiness, Love and Wisdom*.

Road Trip!!

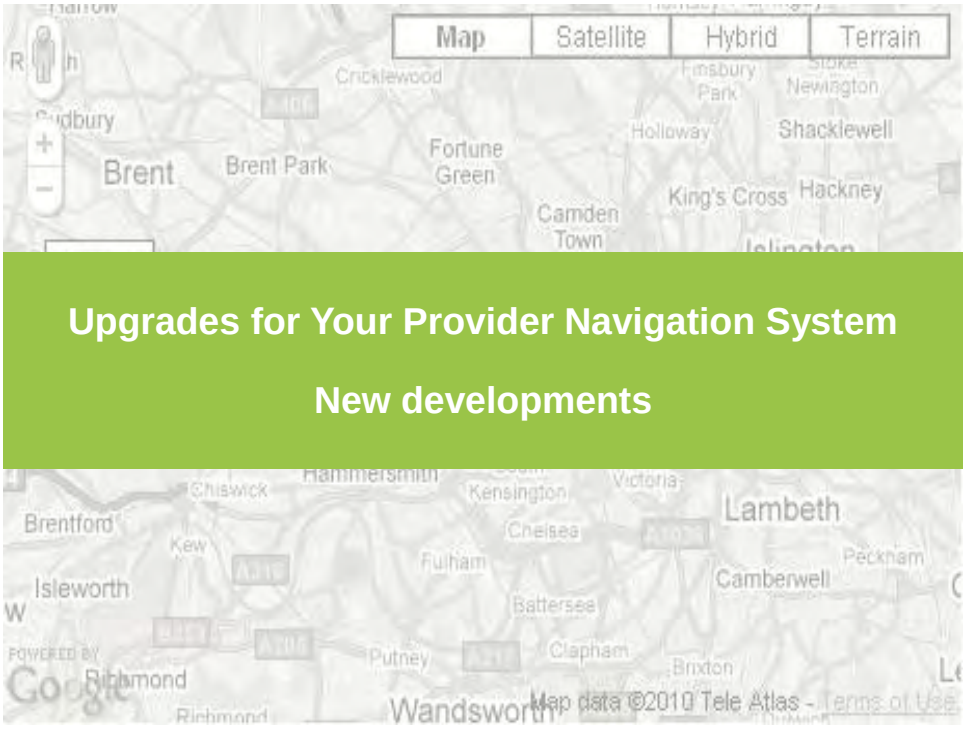
Where are we, in the first place?

And where is this home or head-office we're returning to, anyway?

Establishing baseline and identifying goals
Objective and/or subjective measures
Listener Group / Brain Focus Areas
Listening Checklist/ Rhythm Checklist/ Life inTime Questionnaire
Identification of desired functional outcomes

Are we there yet?

Measuring change
Subjective measures – Observations Checklist, Listening Journal; specific observations, anecdotal reports, videos
Brain focus areas
Function



Upgrades for Your Provider Navigation System

New developments

Life inTime Questionnaire

Questions related to rhythm and timing in your life

Rhythm Checklist

A framework for behavioral observations related to rhythm and timing

The Test of Auditory and Visual Skills (TAVS)

A screening tool to assess auditory processing skills including

Temporal processing

Auditory pattern processing

Auditory discrimination

Sound localization

Auditory and visual processing

Overview

The Test of Auditory and Visual Skills **TAVS**

- Objective measure for pre /post listening
- Low level auditory and visual processing
- Assesses areas concerned with timing, intensity, sequencing and frequency
- Quick and easy
- Suitable for age 5 upwards

Harvard Beat Assessment Test (H-BAT)

A battery for assessing beat perception and production and their dissociation

Battery for the Assessment of Auditory Sensorimotor Timing Abilities (BAASTA)

A systematic assessment of rhythm perception and auditory-motor coupling

The Montreal Battery of Evaluation of Musical Abilities (MBEMA) in Childhood

A tool for assessing musical abilities in children

The Beat Alignment Test (BAT)

An examination of beat perception in isolation from beat synchronization

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Sound Frequencies and Function

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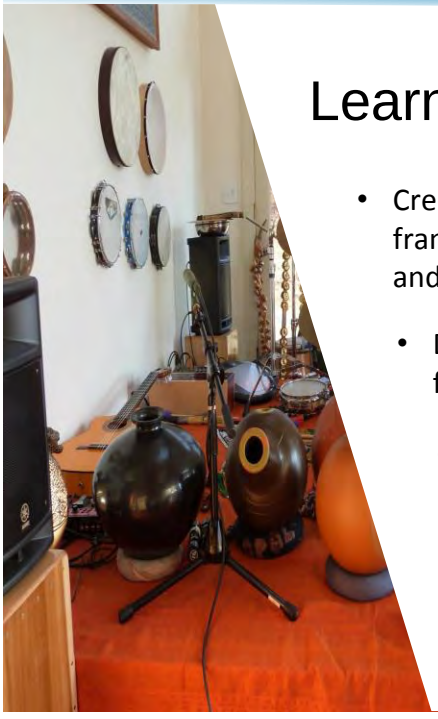


Learning Objectives

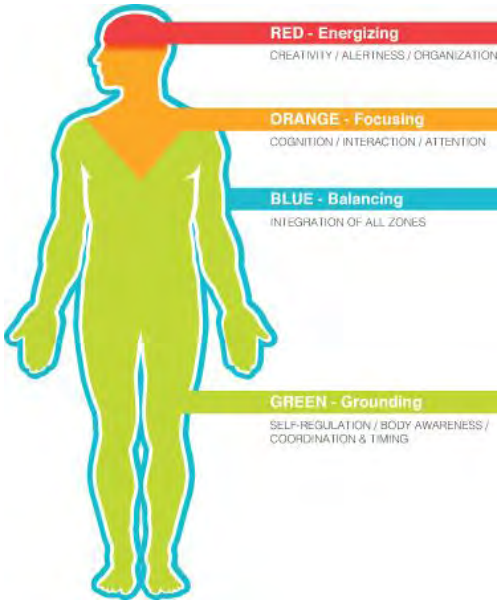
- Credit Dr. Alfred Tomatis for a framework relating sound frequencies and human functions
  - Describe the progression of sound frequency stimulation in inTime
    - Name the colors corresponding to frequency ranges and thereby identifying the "zone" emphasized
      - Identify the general feeling of each zone, as well as a few related functions

"Prompted by listening, the ear takes over the body and organizes all the connections necessary….Most exciting and important is that the desire to listen has enormous power to induce change."

- Alfred A. Tomatis

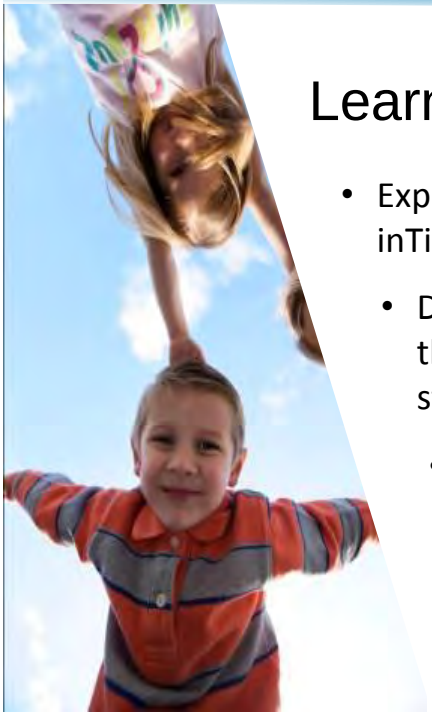
The Ear and the Voice

Blue	Full Frequency Spectrum
Red	High Frequencies
Orange	Middle-High Frequencies
Green	Low Frequencies


RED - Energizing
CREATIVITY / ALERTNESS / ORGANIZATION
ORANGE - Focusing
COGNITION / INTERACTION / ATTENTION
BLUE - Balancing
INTEGRATION OF ALL ZONES
GREEN - Grounding
SELF-REGULATION / BODY AWARENESS / COORDINATION & TIMING

inTime Master Class

inTime In-depth



Learning Objectives

- Explain the rationale behind inTime
  - Delineate the aspects of inTime that contribute to the distinctive stimulation it provides
    - Describe the general structure of inTime
      - Describe the modular design of inTime and identify characteristics of each phase

Keep Your Beat!

Improve rhythm awareness and timing.

Improve listening.

Why improve rhythm?

Rhythm awareness has physiologic and neurologic impact, affecting both our ability to receive or take in stimulation and our ability to respond or perform.

Why improve listening?

Efficient listening provides the nervous system with optimal acoustic input, a valuable nutrient for the brain.

How does inTime work?

How does inTime work?

Music

How does inTime work?

Temporal Structure - accessible pulse/beat, tempo, meter (cycle) and polymeters, rhythm (pattern) and polyrhythms

How does inTime work?

Entrainment – the physical phenomena of synchrony that occurs when a movement or rhythm influences another

How does inTime work?

Sound frequency training
with a progressive emphasis –
low, mid-high, high and full spectrum

How does inTime work?

Familiarity and Novelty –
Rhythm and acoustic

How does inTime work?

Pattern

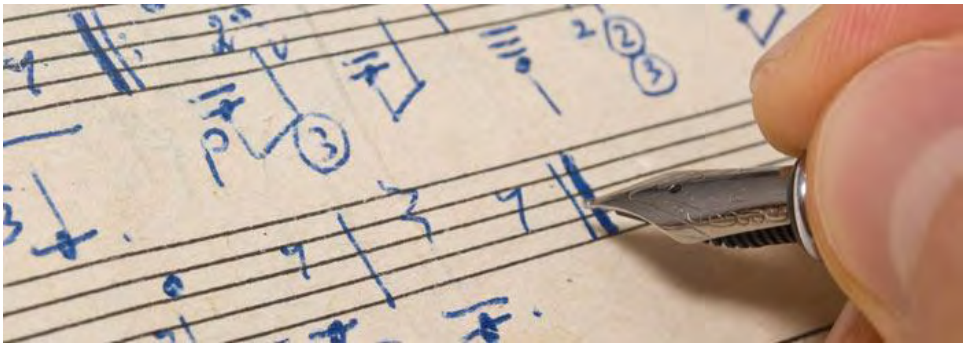
How does inTime work?

Neuroacoustic Modifications –
volume adjustments, dynamic frequency and volume contrasts, audiobursting, infrequent filtration, panning

How does inTime work?

Movement

How is the music of inTime organized?



inTime Organization

Albums 1-4: PERCUSSION		
1	Low frequency	Green zone
2	Mid-high frequency	Orange zone
3	High frequency	Red zone
4	Full sound frequency spectrum	Blue zone

Albums 5-8: COMBINED		
5	Low frequency	Green zone
6	Mid-high frequency	Orange zone
7	High frequency	Red zone
8	Full sound frequency spectrum	Blue zone

inTime Organization

- Each album contains four 9-minute modules, each with the ABC Modular design.
- The modules are organized such that modules 2 and 3 are relatively more complex and/or intense than modules 1 and 4.
- Spatial stereo with varied dynamics

PERCUSSION

Orchestrated Rhythms (Albums 1-4)

- Rhythms are the music!
- A step beyond rhythm as an essential element of music – rhythms are combined to become music.

COMBINED

Foundational Rhythms with New Melodies (Albums 5-8)

- The basic rhythmic structure of corresponding modules is maintained in a supportive, foundational role.
- Melodies and harmonies, played on newly introduced instruments provide a rich, coherent musical layer.
- A different listening experience.

Why emphasize rhythm and percussion?

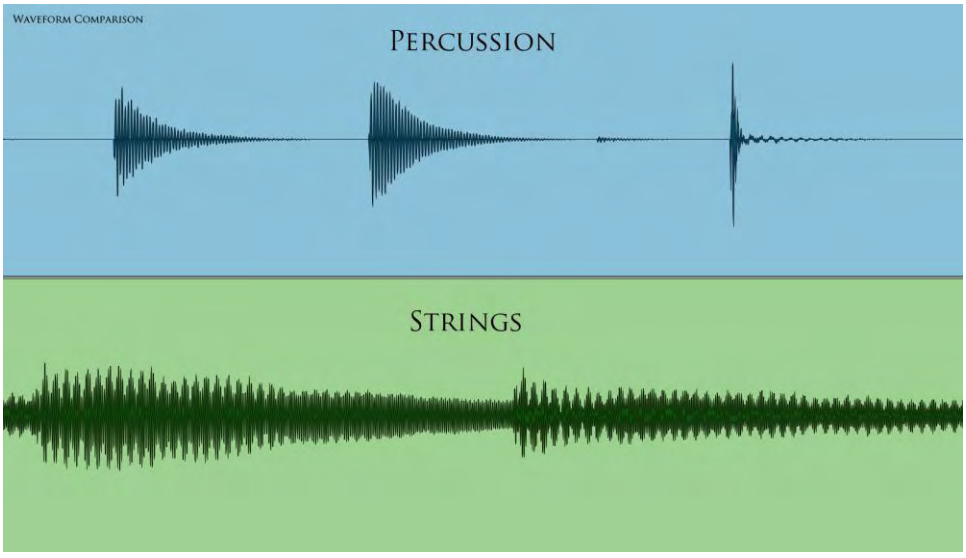
Why the emphasis on rhythm?

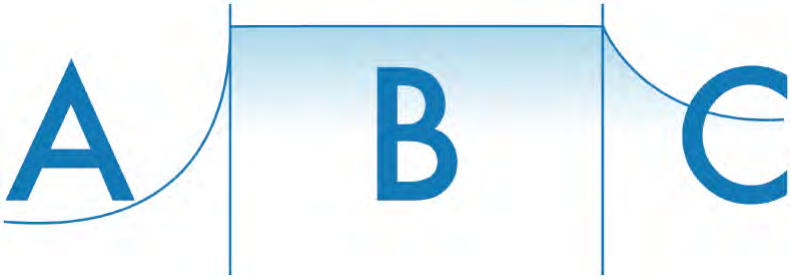
- The pulse is the foundation.
- From ancient times it has been known as a structuring force of life.
- It presents the brain with patterned stimulation.
- It entrains.

Listening to rhythm stimulates rhythm!

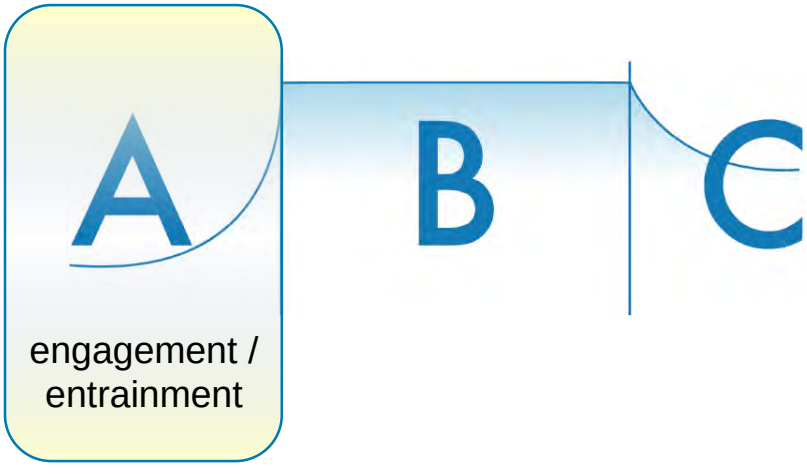
Why choose the sound of percussion instruments?

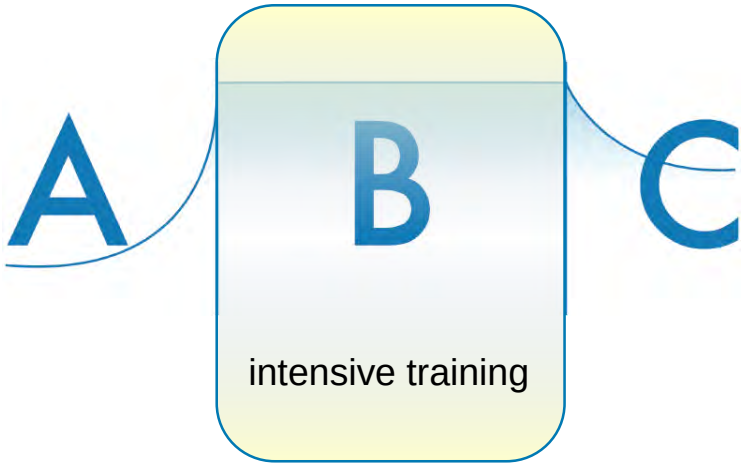
- Familiarity
- Distinct timbre
- Wide sound range
- Percussive tones may stimulate faster learning and greater memory than other tones
- Natural dynamic frequency and volume contrast
- Temporal structure
- Ease of pattern recognition

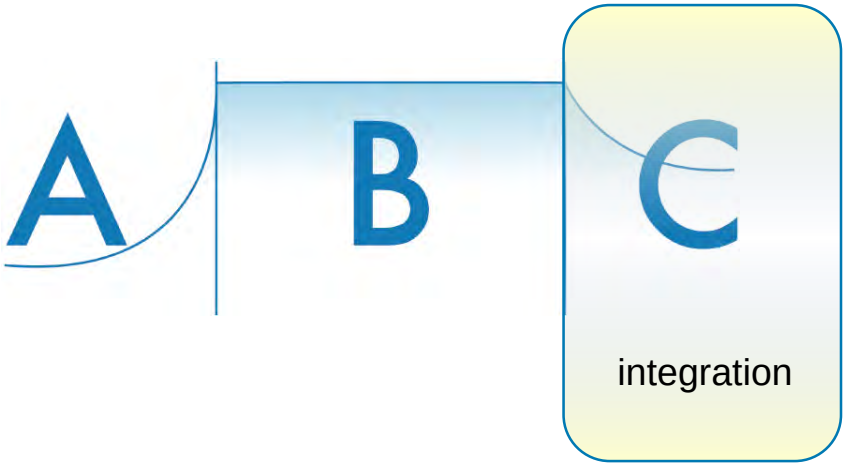

Waveform Comparison
Percussion
Strings

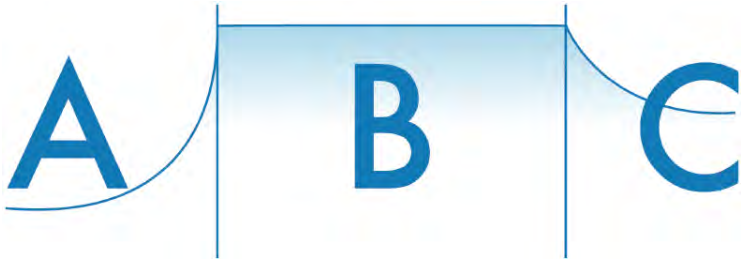

A
B
C

Listening Experience




A
B
C
intensive training

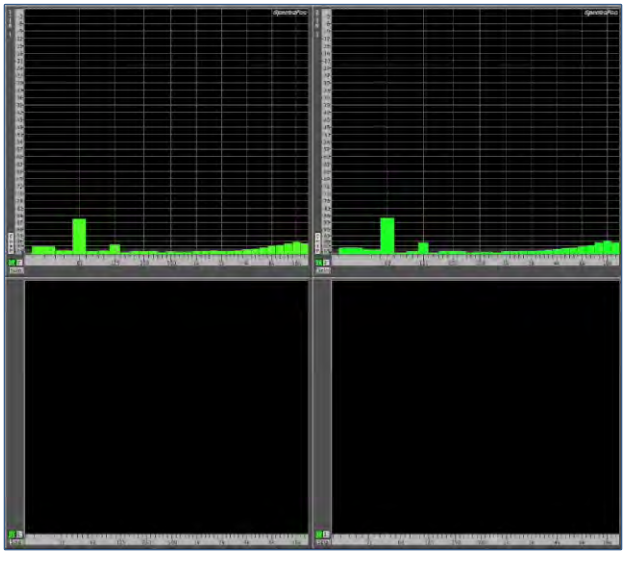

A
B
C
integration



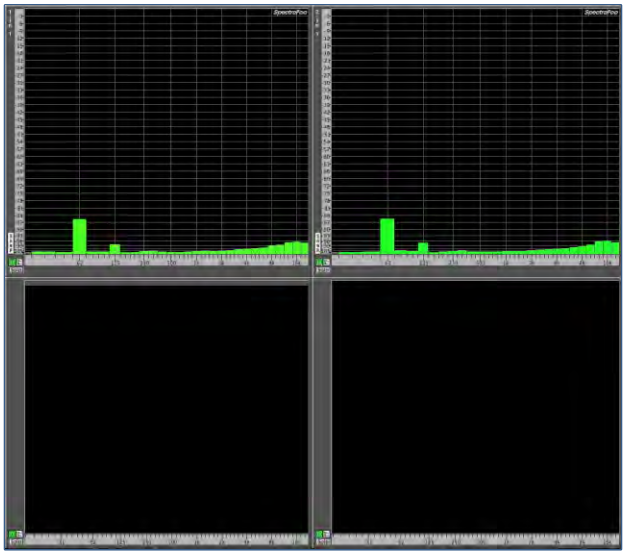
engagement / entrainment

intensive training

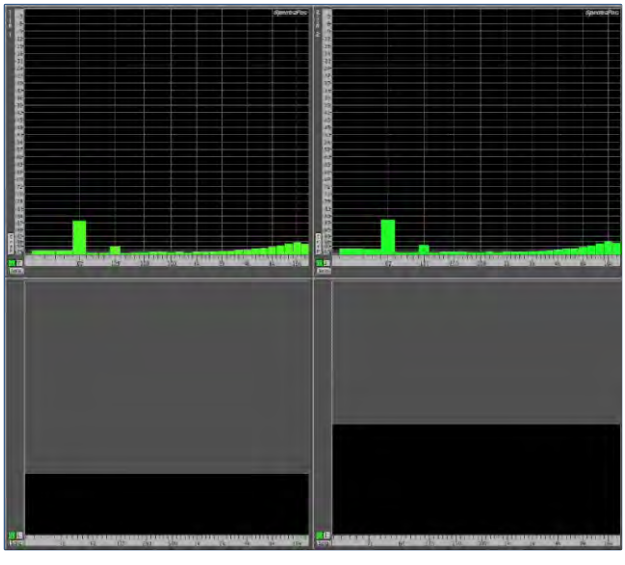
integration



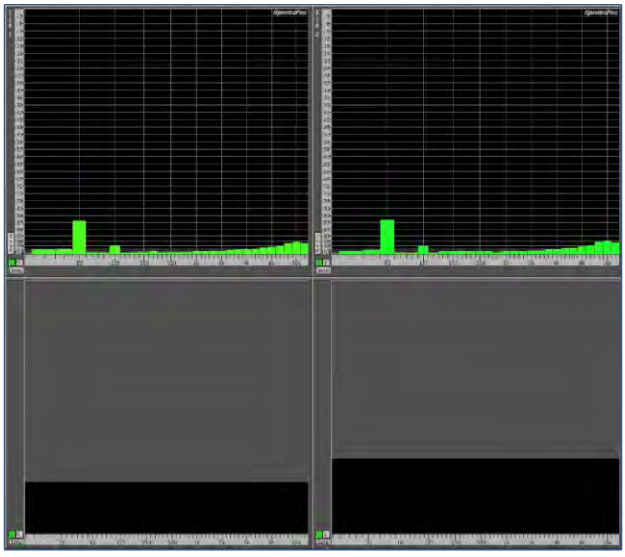
A phase module 1.1



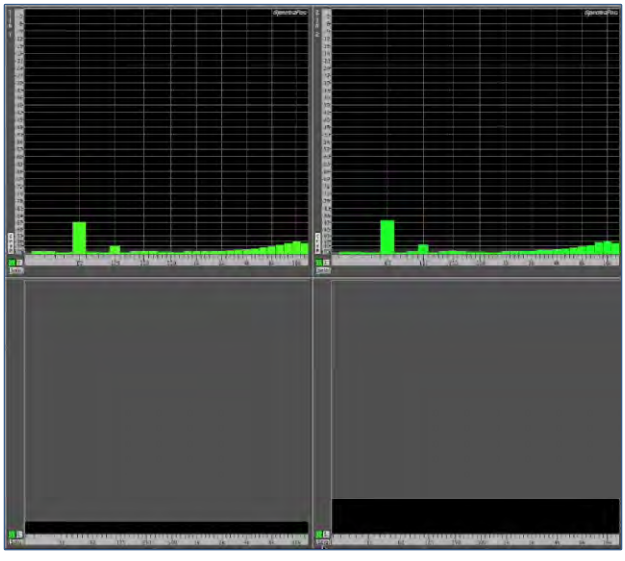
B phase module 1.1



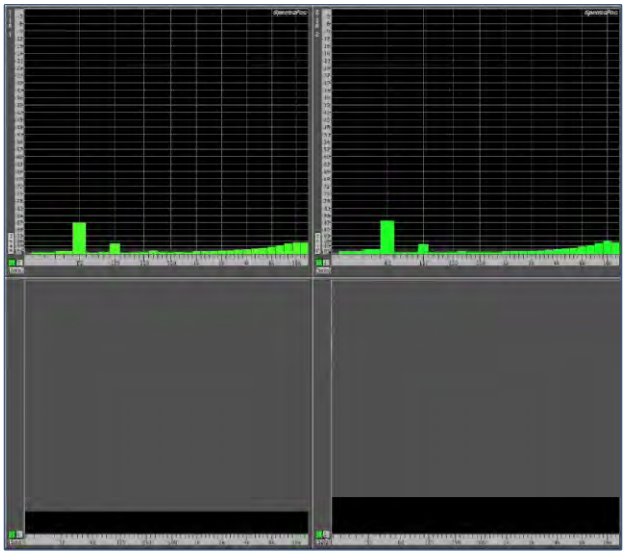
C phase module 1.1



B phase module 2.1



A into B phase module 3.3



B phase module 4.4

inTime Master Class

Protocols

Learning Objectives

- Name the instrumentation difference between albums 1-4 and 5-8
- Explain listening schedules in relation to inTime
- Explain the 4 basic inTime listening protocols
- Recognize the versatility of the inTime compilation for deeper program personalization

Rhythmic Music
Rhythms and Sound Frequency Stimulation

Orchestrated Percussive Rhythms
Green, orange, red and blue zones
Albums 1-4, “percussion”

Rhythms as Foundations for New Melodies
Green, orange, red and blue zones
Albums 5-8, “combined”

Personalized Programming

- 4 Protocol Options (A,B,C and D) and unlimited opportunities for others
- 4 Schedules (extended, base, condensed and advanced)
- Activities (discussion to follow in Activities session)

Cycle = 80 nine-minute modules
= 12 hours listening

Module = 9 minutes listening

inTime Listening Schedules

Schedule	Intensity	Modules Per Day	Minutes Per Day	Albums Per Week	Minutes Per Week	Weeks Needed to Complete a Cycle
Extended	Low	1	9	.5	45	16
Base	Mod	2	18	1	90	8
Condensed	Mod	2	18	1	90	8
Advanced	High	4	36	2	180	4

Protocol Selection

- Sense of safety; comfort; feeling good
- Personal preference
- Listener groups: intervention, learning, communication, wellness, performance
- Brain focus areas: listener goals

Listener Group	Recommended Cycles
Intervention	4+
Learning	4
Communication	4
Wellness	2+
Performance	4

Brain Focus

Stress Response
Motor Coordination
Social and Emotional
Auditory Processing
Executive Function
Communication
Creative Expression

Protocol A

Listener Groups:
all, particularly Intervention, Performance

Brain Focus:
all, especially Motor Coordination, Auditory Processing

Description: maximum concentration percussion (i.e. first cycle exclusively percussion) followed by maximum concentration combined (second cycle exclusively combined), each cycle supporting a week by week climb from green to orange to red to blue zones, followed by a return to green over the course of the second half of each cycle.

Protocol A

Training Progression

Cycle	Album Progression
1	1,2,3,4,4,3,2,1
2	5,6,7,8,8,7,6,5
3	1,2,3,4,4,3,2,1
4	5,6,7,8,8,7,6,5

Protocol B

Listener Groups: all

Brain Focus: all

Description: maximum/moderate concentration percussion followed by maximum/moderate concentration combined in the first cycle, with two week by week climbs from green to orange to red to blue zones; gradual climb from green to orange to red to blue with two consecutive albums per zone - first percussion and then combined.

Protocol B

Training Progression

Cycle	Album Progression
1	1,2,3,4,5,6,7,8
2	1,5,2,6,3,7,4,8
3	1,2,3,4,5,6,7,8
4	1,5,2,6,3,7,4,8

Protocol C

Listener Groups: all, particularly Communication

Brain Focus: all

Description: moderate percussion/moderate combined; gradual zone-based progression, climbing up the frequency spectrum from green, to orange to red to blue, and then back down from blue to red, to orange and then green; two consecutive albums per zone- first percussion and then combined.

Protocol C

Training Progression

Cycle	Album Progression
1	1,5,2,6,3,7,4,8
2	4,8,3,7,2,6,1,5
3	1,5,2,6,3,7,4,8
4	4,8,3,7,2,6,1,5

Protocol D

Listener Groups:
all; particularly Communication, Learning

Brain Focus:
all; especially Auditory Processing, Communication, Social/Emotional, Executive Function

Description: the least concentration of percussion; pairing of "percussion" and "combined" throughout a gradual zone-based progression, climbing up the frequency spectrum from green, to orange to red to blue, and then back down from blue to red, to orange and then green.

Protocol D

Training Progression

Cycle	Album Progression
1	1/5, 1/5, 2/6, 2/6, 3/7, 3/7, 4/8, 4/8
2	4/8, 4/8, 3/7, 3/7, 2/6, 2/6, 1/5, 1/5
3	1/5, 1/5, 2/6, 2/6, 3/7, 3/7, 4/8, 4/8
4	4/8, 4/8, 3/7, 3/7, 2/6, 2/6, 1/5, 1/5

*The album progression in this protocol involves alternating between modules from the two corresponding albums of a frequency zone (i.e. 1 & 5, 2 & 6, 3 & 7, and 4 & 8). Because of this alternation, it takes twice as long to complete an album.

Versatile Program

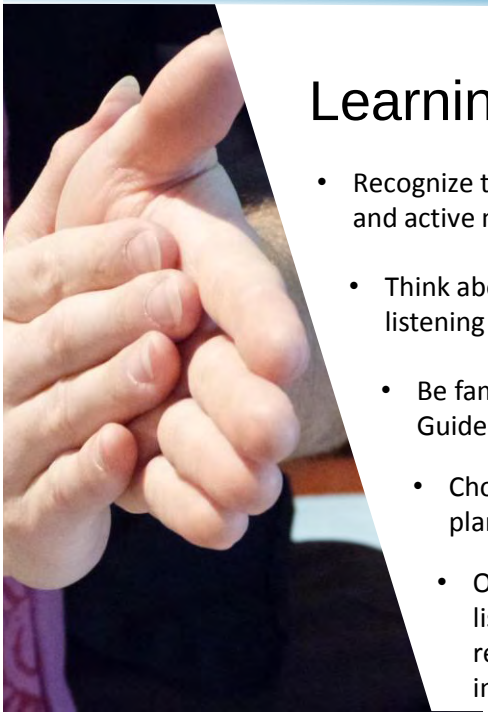
Basic Protocols

Countless Possibilities

inTime Master Class

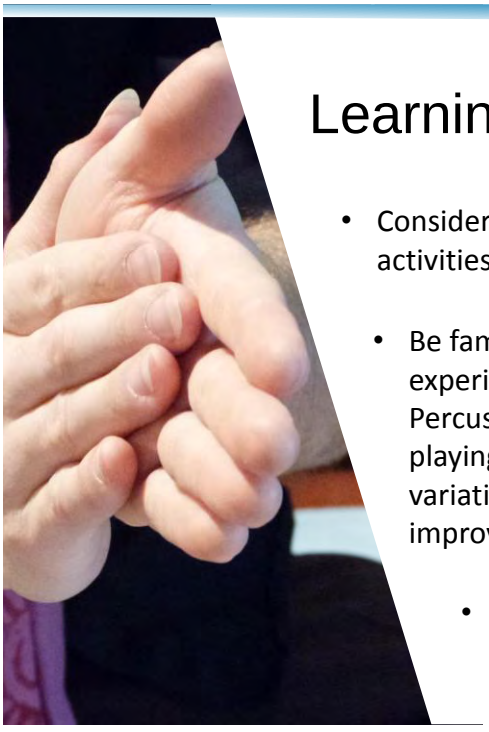
Activities

THE LISTENING PROGRAM by ADVANCED BRAIN TECHNOLOGIES



Learning Objectives

- Recognize the connection between rhythm and active movement
- Think about the reasons for doing post-music listening activities
- Be familiar with the inTime Activity Provider Guide
- Choose/create motivating, fun activity plans
- Offer specific activities that address listeners' areas of need (i.e. self regulation, sensory-motor function, or interaction)



Learning Objectives

- Consider how to grade movement activities based on abilities and need
  - Be familiar with facilitated rhythmic experiences, including album 9 (Body Percussion), listen and repeat, unison playing, sustaining rhythms, tempo variations, and structured and open improvisation
    - Consider rhythms in life

Why do activities follow listening?

The ability to adjust to rhythmic stimulation, tune in to time and to what's going on within it, and respond adaptively is good for us and good for our brains.

Activities following listening are motivating, active experiences that stimulate rhythm awareness or beat perception, and timing.

inTime Activities

2 primary – Activity During Listening and Activity Following Listening

1 supplemental – Life Rhythms

Moving to the beat while listening isn't just enjoyable…it actually helps us to more accurately tune into the time structure of auditory information.

Activity during listening

=

Naturally occurring movement

No observable movement or change in behavior is fine too!

activity following listening = unstructured & structured activities immediately following a daily listening session to:

1. stimulate adjustment, awareness of the pulse of time, and what is going on within time
2. provide experiences that align with frequency zones
3. support self-regulation, sensory-motor function and interaction

It's optional!...but DO IT!

Activity Following Listening

4 Activity Plans (1,2,3 and 4) – Guidelines for an Active Process	
Plans 1 and 4	Facilitator necessary
Plans 2 and 3	Can be carried out independently

Activity Plans consist of Three, 3-5 minute phases

Adjustment

Body Percussion

Drumming

Adjustment – the process of becoming used to/rearranging oneself following the music-listening experience.

2 choices –
stillness or movement

self-regulation

sensory-motor function

interaction

Adjustment

How do I feel?

What's my rhythm and tempo?

How does it fit with the rhythms, pace and timing demands of what's around me?

What'll I do?

Body Percussion – experiences with time (meter) and the pulse (or steady beats) in time

Body Percussion

How is time being measured here?

Can I find and keep the beat within the time I've got?

Body Percussion Demo

Meter: ¾ - call and response; improvisation based on meter

Body Percussion Demo

3 types of clapping

Drumming – experiences with rhythm

Drumming

What pattern am I following now?

How'd I find it?

Does it fit in time?

What else is going on within time here?

Does "my" rhythm fit in with the other rhythms going on?

Can I sustain mine?

Drum Demo

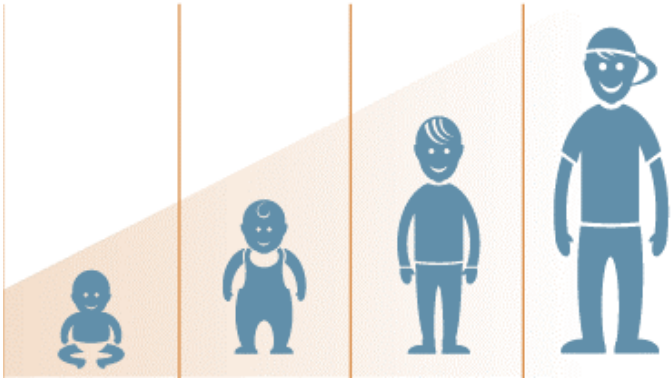
inTime Drum

- listen and repeat
- tempo variation

find and follow a rhythm

There are no developmental norms for rhythm development!

For nearly every developmental milestone rhythm is important.



Grading activities

Normal developmental progressions apply.

Keep in mind some things may come easier when you're engaged with rhythm and time!!!

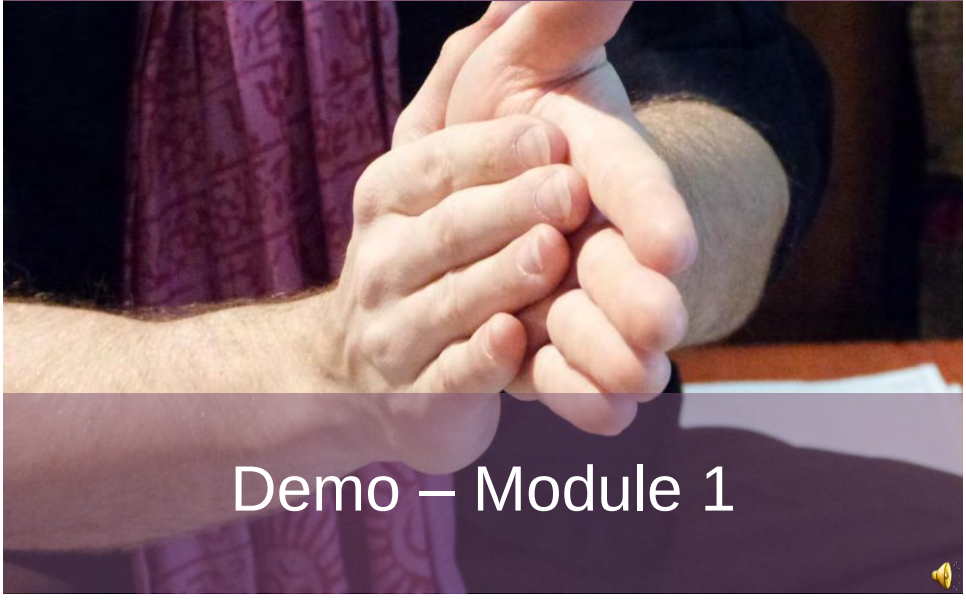
Grading activities

- Physiology
- Emotion
- Behavior
- Sensory Processing
- Postural control, arm/hand control
- Motor Abilities
- Integration of the two sides of the body
- Attention
- Motor Planning
- Sequencing
- Language

Album 9 – Body Percussion

Four, 5-minute modules using body and voice

Body Percussion Demo



Life Rhythms – inTime in real life!

practical application of rhythm awareness & timing and listening

Timing is EVERYTHING!

inTime Master Class

Equipment Review

THE LISTENING PROGRAM by ADVANCED BRAIN TECHNOLOGIES

Overview

Waves

Headphones

iPod

waves

The multi-sensory audio system optimized for The Listening Program and inTime

waves

- Natural sound headphones – Lightweight, semi-open design, with self-adjusting headband
- Exclusive high output bone conduction transducer with floating mount
- Single, tri-core flex headphone cable
- Pocket headphone amplifier with audio processor and dual mode amplification
- Membrane keypad and LCD display
- USB rechargeable batteries with LED indicator light

Waves™ Operation

1. Connect the 6” cable from the headphone port on your device to the IN port on the headphone amplifier.

2. Connect the headphone cable to the AC & BC port front forward.

Waves™ Operation

3. Power amplifier ON/ OFF by pressing and holding power button until you see “powering on” or “powering off” on the display.

Waves™ Operation

4. Plug in USB cable to charge.

- Low battery = flashing red LED
- Charging = flashing green LED
- Full Charge = steady green LED

Waves™ Operation

5. Control AC volume and BC power using keypad.

Approved Headphones

Open

- Best spatial quality
- Natural sound

Closed

- Close proximity listening
- Noisy listening environment

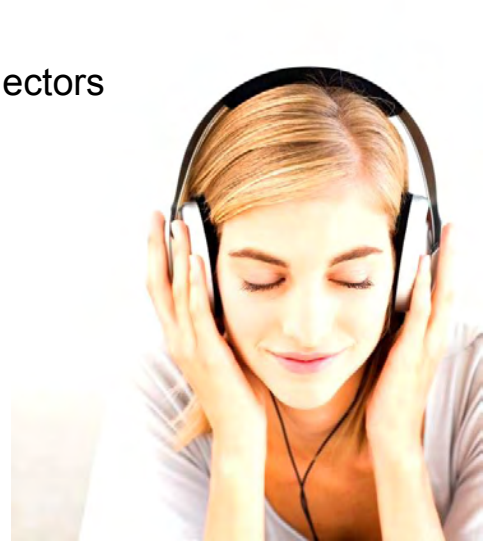
No “in ear” or noise cancelling headphones

Approved Headphones

Open	Closed
AKG K99 	Sennheiser HD 280 
Sennheiser HD 518-558 	

Headphone Tips

- Adjust for fit
- 1/8” mini and 1/4” connectors
- Left and right
- Check connections
- Comfortable volume



iPod

- High-quality music
- Convenient and flexible
- Do not attempt to add music
- Do not connect to a computer
- Maximum volume is limited
- No ear buds
- 1 year Apple warranty
- Register

iPod Operation

1. Connect headphones to iPod.
2. Power iPod on.
3. Select the correct inTime module from Albums.
4. Press play, and adjust volume to a comfortable level.

iPod Tips

- Charge your iPod when it shows less than a 50% charge
- Plug and unplug AC charger carefully
- Make sure all connections are secure
- Do not connect iPod to a computer
- Do not reset iPod settings
- Visit Support at advancedbrain.com for additional tips

iPod and Waves Registration

Register iPods and Waves equipment
advancedbrain.com/equipmentreg

Owner registers serial number on box or on equipment

A little time invested in training your clients will make for happy listeners!

in Time

inTime Master Class

Program Planning

THE LISTENING PROGRAM by ADVANCED BRAIN TECHNOLOGIES

Learning Objectives

- Differentiate listening protocol, activity plan and listener plan
- Refer to and modify program considerations discussed in other trainings
- Understand the process of planning a program
- Apply planning process to listener cases
- Recognize the programming possibilities of inTime
- Acknowledge the role of the provider within the inTime method

Lifestyle Considerations

- School/work schedule
- Leisure time
- Other activities
- Family routine
- Organization
- Time management
- Vacations

Special Considerations

- The scope of your practice
- ENT or Audiologist
- Hearing Loss
- Seizures
- Medication
- Psychiatric Disorders/Affective Disorders/Mental Illness
- Acquired Brain Injury
- Medical stability

Core

i. Classical – SPECTRUM, ACHIEVE, LEVEL ONE

ii. World Music - inTime

Specialized

i. SLEEP

Why inTime ?

- Personal preference
- Rhythm
- Shorter listening modules
- Activities
- Versatility

inTime Listener Plan

InTime Listening Plan

Background

Listening

Activities

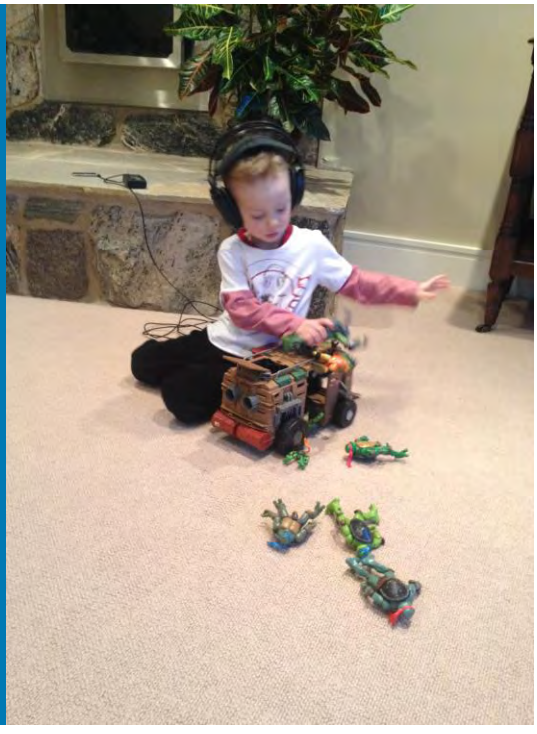
Get into the rhythm of

…and get the most out of it!

Missed Sessions

If you miss	
One or two modules in a week	Continue with no change
Three or more modules in a week	Repeat the album
One week	Repeat the last album you completed and move on
Two or more weeks	Begin your cycle again

inTime in Place



inTime Master Class

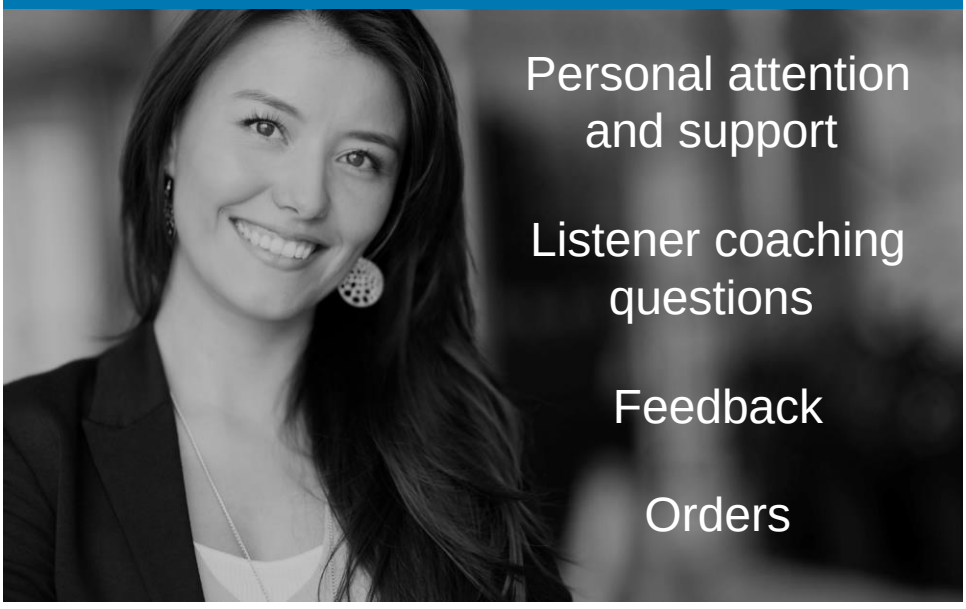
Next Steps

THE LISTENING PROGRAM by ADVANCED BRAIN TECHNOLOGIES

Learning Objectives

- Identify provider support & resources available through ABT
- Understand the ordering & reselling of listening systems
- Contemplate case study documentation and certification
- Recognize professional development opportunities available through ABT

Program Consultant



advancedbrain.com

- Listener Resource Center; forms, documents, product registration, etc.
- Provider Resource Center; (password protected), provider resources, pricelists, marketing, newsletters, Provider Education Radio, etc.
- Community; blog, newsletters, webinars & TLP Radio shows, video library, etc.
- Product Information; all TLP programs and more
- Science, research & case studies

What's in the box?

- iPod nano preloaded with inTime music library
- Charging cable & AC adapter
- Drum & mallets
- Guidebook
- Waves or Headphones*

*depending on which system you order.

Ordering & Reselling Listening Systems

- Personal use, demonstration, use within your practice
- Resell to clients
- Provider discounts
- Listener direct purchase
- Site license

Order Form

- 4 inTime listening system options
- Additional drums and mallets
- Brochures (50 packs)

Case Study Documentation and Certification

- Follow case study guidelines.
- Completion of inTime provider training, quiz, and approved case study will result in certification as an inTime provider.

Professional Development

TLP Provider Certification Course – LIVE & WEB
Certification in SPECTRUM, ACHIEVE, LEVEL ONE, SLEEP, ONLINE, WAVES and more.

TLP Provider Course – LIVE & WEB
Intro Course to offer TLP ONLINE, WAVES & SLEEP

inTime Master Class – LIVE & WEB
Advanced Course to offer inTime

inTime Provider Course – LIVE & WEB
Intro Course to offer inTime

TAVS Certification Course – LIVE & WEB
Certification to Administer TAVS

Our Social Sites

facebook.com/advancedbraintechnologies

twitter.com/advancedbrain

pinterest.com/advancedbrain

youtube.com/advancedbrain

Conclusion

- Certificate
- Username & Password
- Program Consultant
- Orders

inTime

Thank You and Congratulations!