

ECIS

Mindfulness in Schools

Professional Training Series: Transformational Teaching and Learning

Deep Dive

November 3rd, 2022

Mindfulness in Education

Presented by

Nisanart (Gift) Dharmageisirattana

Director of Mindfulness Academy of Asia
and The American School of Bangkok Green Valley





Biography

GIFT NISANART DHARMAGEISIRATTANA

DIRECTOR



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v Mindfulness Academy of Asia
mindfulnessacademyasia.com

EDUCATION & TRAINING

- Bachelor's Degree in Film and Television from New York University (1998)
- Master's Degree in Education Administration in Public Education from Teachers College, Columbia University (2013)
- Trained at Columbia University (self-awareness), Yale (Ruler), India, Thailand, and Plum Village France on meditation and mindfulness techniques

POSITION

- Director The American School of Bangkok Green Valley
- Director Mindfulness Academy of Asia
- Board Member of Educational Collaborative for International Schools

ACCOMPLISHMENTS

- Teach mindfulness and meditation to over 2,000 stakeholders at The American School of Bangkok since 2012
- Presented Mindfulness in Education at EARCOS Leadership Conference in Malaysia, Asia Pacific International School Conference in Hong Kong, ECIS Leadership Conferences in Luxembourg, Lisbon, and London since 2017
- Published a mindfulness book, "The Mindful Way" to help parents and educators apply mindfulness
- Train The Ministry of Education of Thailand, Electricity Generating Authority of Thailand, Axa Insurance, Bumrungrad Hospital, Princ Hospital Groups, Thammasat University, Srinakarin Virot University and Amata Nakorn
- Train international educators, professional golfers, university students, bureaucrats, business leaders and healthcare professionals on mental well-being.





CURRENT AWARENESS

(Fill OUT THE FORM)

- On a scale 1-5, please describe how you feel at the present moment.

5 - Being high energy

1- Being low energy



- How do you define a happy school?

- What is your expectation from this session?



WHY ARE WE HERE?





Mindfulness brings positive results when...

- Consistently practiced
- Nonjudgmental attitude (pay attention your input, not output)
- Group support

Case Study:

- *F1 In School*



WHAT IS 'MINDFULNESS'?

Mindfulness is the state of mind to be in the present moment with non-judgmental attitude.

'MINDFULNESS'...

Mindfulness is

The **Awareness** that arises from...

Paying Attention

On Purpose

In the Present
Moment

Non-Judgmentally

DIFFERENCE BETWEEN MINDFULNESS AND MEDITATION

Mindfulness	Meditation
<ul style="list-style-type: none">● Non-judgmental Awareness● Focus concentration● Empathy	<ul style="list-style-type: none">● Non-judgmental Awareness● Focus concentration● Empathy● Religions / Philosophies● Deep Self-exploration

EXERCISE



Don't JUDGE yourself!

- (Mindful Breathing) - 1 min.
- (Mindful Movement) - 5 min.
- (Mindful Breathing) - 1 min.

Mindfulness Program

At

ASB Green Valley





Mindful Thinking

One is aware of his or her thoughts. Positive thoughts are important to maintain healthy mental formations. Mental formations are feelings, perceptions, and experiences. When a person uses the right techniques to transform negative thoughts into positive thoughts, that person is practicing mindful thinking.



Mindful Speaking

One is aware that he or she speaks at the right time with the right people. When a person speaks truthfully with positive intentions and avoids speaking to hurt others, that person is practicing mindful speaking.



Mindful Listening

One is aware of others thoughts and feelings. When a person listens without speaking, listens with empathy, listens for what is not being said, that person is practicing mindful listening.

TRAINING TEACHERS AND PARENTS ABOUT NEUROSCIENCE OF THE BRAIN



Mindfulness Assembly



Every morning, the whole school meet for morning announcements and morning mindfulness activities, such as:

- Breathing exercises
- Mindful movement
- Body scan
- Metta meditation
- Loving-Kindness affirmation

Breathing Meditation

Early Year Students:
Pre-K, K-1, K-2, K-3

Teaching basics of breathing meditation through story-telling. Story-telling incorporate visual and auditory stimulations in order to keep them focused on the learning objectives. Students mirror the actions and breathing patterns of the character (in this case, Sigi, the mindful puppy) as they listen to the character's journey in the story.



Mindfulness for Elementary



Pinwheel Breathing
(basics of breathing techniques)



Mindful Movement

The key for teaching mindfulness to children is simplicity, engagement, and stimulation.

For example, the Pinwheel Breathing exercise is a simple breathing practice where students learn how to notice and regulate their breathing (simplicity). Student blow on the pinwheel (engagement) and notice how the pinwheel respond to their breath (Stimulation).



Mindfulness Games
(above: Concentration Game)

Go to www.menti.com and use the code 5158 8937

4 Mentimeter



What makes a perfect team?

Google
Project Aristotle

2 years
180 teams
37,000 employees

The answer?

psychological safety



ats

Mindfulness for High School



Mindfulness Assembly



Advisory Class
(life skills)



Overnight Retreats

Mindfulness for Athletes



Mindfulness Movement

WHAT IS THE PURPOSE OF 'MINDFULNESS' IN EDUCATION?



BENEFITS OF IMPLEMENTING MINDFULNESS IN SCHOOLS

Positive Social Emotional Environment for Adults and Students

*TAKES 5 BREATHS
BEFORE THEY
RESPOND*

Reduces Bullying



Practices resilience

*Regulates
moods and
emotions*

*Knows how to
cope with
technology*

addition

SOME FACTS

Measurement of Academic Progress (Standardized Test)

2012 - 2013 - First year that ASB piloted this test

2013 - 2014 - Significant change in score improvement

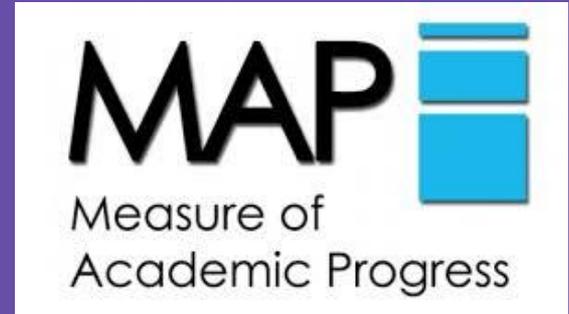
2014 - 2018 - Steady growth in score improvement

What did we do differently in 2013 - 2014?:

1. Students were taught mindful test taking skills:

- Do not hurry
- Do not worry if their peers finish first
- Do Take 5 for relaxation
- Drink water in between breaks
- Eat breakfast and have a good night sleep

2. Proctors mindfully told students to relax before taking the test.



Results: Strong correlation between mindful test taking skills and score improvement; Valid test scores

SOME FACTS

Scholarship Offered from Reputable Universities



Our ASB graduates receive a an average combined scholarships of \$7.8 millions per year from Harvard, Yale NUS Singapore, Tokyo University, Penn State, Purdue, MIT, U of British Columbia, King's College of London, etc.

SOME RESEARCH IN MINDFULNESS IN EDUCATION



Open Small group Discussion

What are some challenging cases related to trauma, school wide implementation, early years, primary, and secondary, and burnout?

Group of 3-4 participants

Please give us your email.
We will send your reading materials.

COLORING EXERCISES

(2 minutes)



<http://www.aurora.edu/student-life/campus-services/wellness/toolbox/stress-relief/meditative-coloring.html#.Vefl2yWqpHw#ixzz3keaojjs8>



What happens while we color?

"The action involves both logic, by which we color forms, and creativity, when mixing and matching colors," says psychologist [Gloria Martinez Ayala](#). "This incorporates the areas of the cerebral cortex involved in vision and fine motor skills [coordination necessary to make small, precise movements]. The relaxation that it provides lowers the activity of the amygdala, a basic part of our brain involved in controlling emotion that is affected by stress."

The Times Educational Supplement
Friday October 2, 2009
www.tes.co.uk

News

15

Schools weak on 'strong' silence

Lack of meaningful quiet time is affecting pupils' reading levels, language ability and well-being, says study

By Aislinn

It is golden. It is the whisper of truth. Its sound was catalogued by Simon and Garfunkel. But silence is still grossly undervalued in schools, according to new research.

Helen Lees, of Birmingham University, claims school noise levels regularly exceed the World Health Organisation's (WHO) standards. And she says this lack of meaningful silence is having an adverse effect on pupils' reading ability, language skills and sense of wellbeing.

Ms Lees believes there are two types of silence in schools: weak and strong. Weak silence includes the authoritarian quiet imposed on pupils when the teacher is talking, or during assembly or registration.

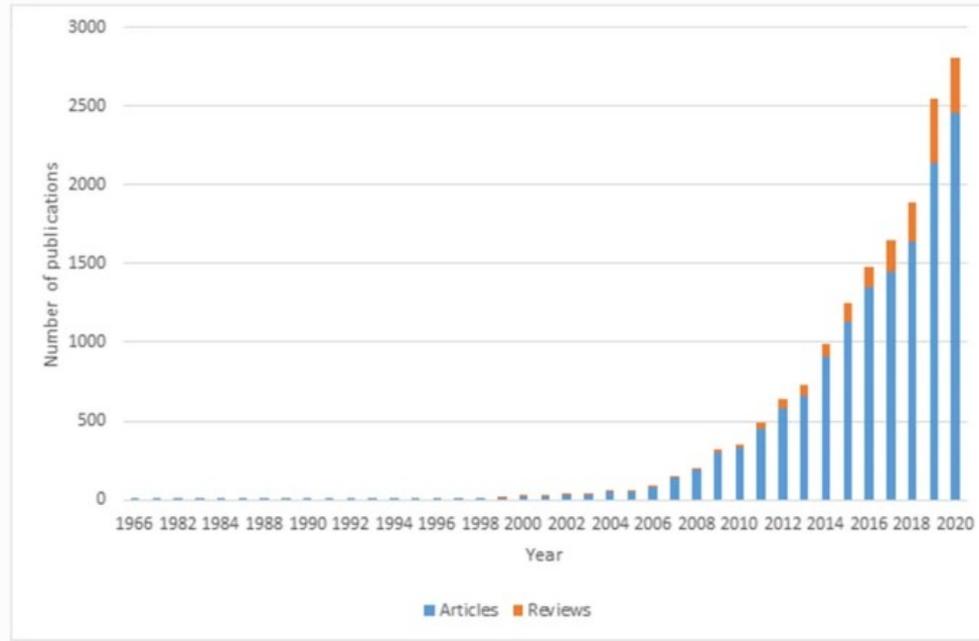
"Such moments of enforced



Quietly does it: a class at Loxcash's Mahanta School meditates their way to natural stillness, which can 'facilitate discovery' according to researchers.

CURRENT TRENDS IN EDUCATION

Fig. 1



Number of publications on mindfulness indexed in Web of Science 1966–2020

Google Search
Worldwide

TRENDS IN EDUCATION 2022

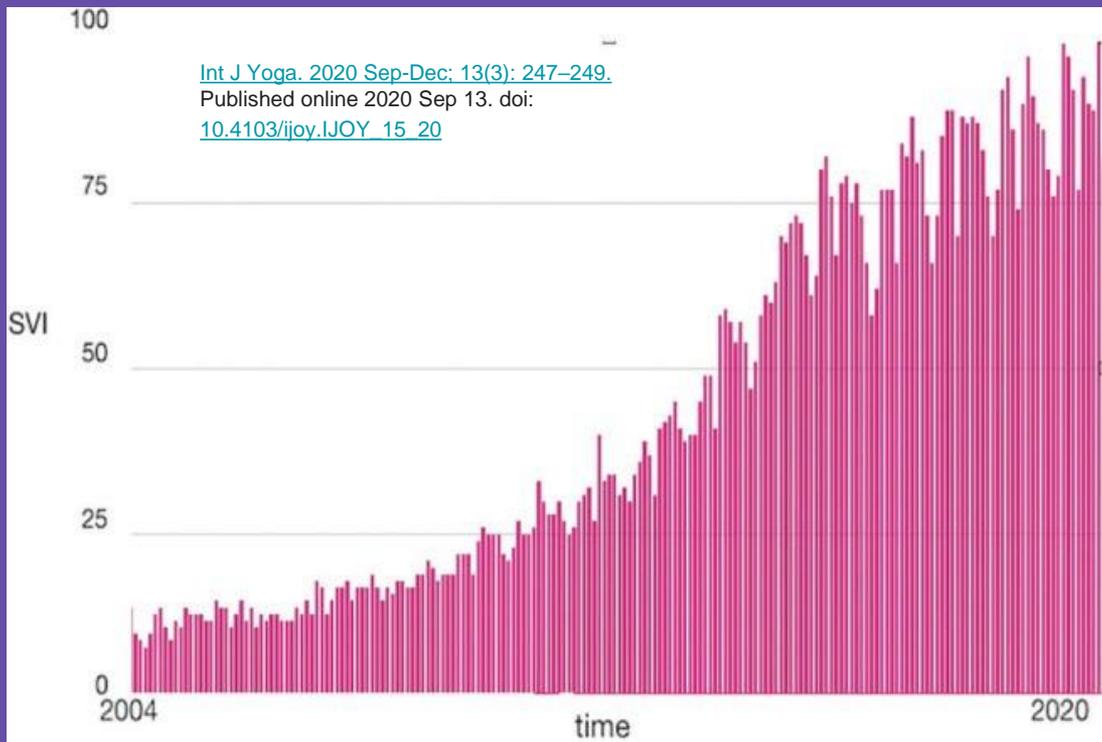


Table 1

Countries with the most “mindfulness” searches (%)

1. Ireland 100
2. Denmark 87
3. Netherlands 86
4. Sweden 58
5. New Zealand 52
6. Australia 51
7. United Kingdom 49
8. Norway 44
9. Spain 44
10. Finland 40

Greater Mindfulness is Associated With Better Academic Achievement in Middle School

1 / 10

Camila Caballero¹, Ethan Scherer², Martin R. West^{2,3}, Michael D. Mrazek⁴, Christopher F. O. Gabrieli³, and John D. E. Gabrieli^{3,5,6}

ABSTRACT— Despite increasing interest in improving academic outcomes for students by enhancing mindfulness, there is a paucity of evidence that greater mindfulness is associated with success in school. We measured mindfulness with the short-form Mindful Attention Awareness Scale (MAAS) in over 2,000 urban students in Grades 5–8. The MAAS had good internal consistency and scale homogeneity. Greater mindfulness correlated significantly with better academic achievement as measured by grade point average and standardized tests of mathematics and literacy greater improvement in academic performance from the prior school year, better attendance, and fewer suspensions. The relation between mindfulness and academic achievement was similar across demographic characteristics. These findings support the reliability of the MAAS as a measure of mindfulness among youth and provide initial evidence of an association between mindfulness and academic achievement. This association strengthens the rationale to explore whether mindfulness-based interventions can enhance academic outcomes by leveraging the malleability of mindfulness.

Mindfulness has captured the attention of educators as an important, yet traditionally overlooked, capacity that could support both cognitive and social-emotional abilities in students, and in turn, enhance academic and behavioral outcomes. Mindfulness is defined in Western cultures as the ability to “[pay] attention in a particular way, on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 1994; Van Dam et al., 2018). Well-controlled studies have shown that interventions designed to augment mindfulness in students have enhanced cognitive abilities relevant to academic achievement, including reading comprehension and working memory capacity (Corbett, 2011; Mrazek, Franklin, Phillips, Baird, & Schooler, 2013; Napoli, Krech, & Holley, 2005; Zenner, Herrleben-Kurz, & Walach, 2014). Additionally, research has documented the value of mindfulness-based interventions (MBIs) for enhancing social-emotional wellbeing (Broderick & Metz, 2009; Huppert & Johnson, 2010; Waters, Barsky, Ridd, & Allen, 2015). These findings have motivated efforts to introduce school-based MBIs as a means to support the cognitive and social-emotional growth of students (Lawlor, 2014). An individual’s level of mindfulness is typically measured using self-report questionnaires, such as the Mindful Attention Awareness Scale (MAAS) designed for adults (Brown & Ryan, 2003) and a short form, adapted for children and adolescents (Black, Sussman, Johnson, & Milam, 2012). Here, we asked whether mindfulness, as measured by the short-form MAAS, is associated with academic outcomes of grade point average (GPA), standardized test scores, attendance, and suspension for U.S. urban students in Grades 5–8.

There is some evidence that MBIs can enhance academic achievement, but there is no direct evidence that mindfulness per se is associated with academic achievement in U.S.

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³Harvard Graduate School of Education, Harvard University.
⁴Department of Psychological and Brain Sciences, University of California, San Diego.
⁵McGovern Institute for Brain Research, Massachusetts Institute of Technology.
⁶Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology.
Address correspondence to Camila Caballero, Department of Psychology, Yale University, 2 Hillhouse Avenue, New Haven, CT 06511; e-mail: camila.caballero@yale.edu



“Greater mindfulness correlated significantly with better academic achievement as measured by grade point average and standardized tests of mathematics and literacy, greater improvement in academic performance from the prior school year, better attendance, and fewer suspensions.”

Table 1
Descriptive Statistics for Each Mindful Attention Awareness Scale (MAAS) Item

	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>SD</i>	<i>Factor Loading</i>
1. It seems I am “running on automatic,” without much awareness of what I am doing.	1	6	3.84	1.47	0.68
2. I rush through activities without being really attentive to them.	1	6	4.24	1.44	0.68
3. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.	1	6	3.74	1.54	0.68
4. I do jobs or tasks automatically, without being aware of what I am doing.	1	6	3.82	1.51	0.71
5. I find myself preoccupied with the future or the past.	1	6	3.20	1.54	0.64
6. I find myself doing things without paying attention.	1	6	3.83	1.57	0.75

Note. Max. = maximum response option on a 6-point Likert scale (MAAS scoring described in Mindful Attention Awareness Scale section); Min. = minimum response option on a 6-point Likert scale; SD = standard deviation of responses. The loading descriptive statistic indicates the loading of individual items onto the one significant component identified with principal component factor analysis of the responses.

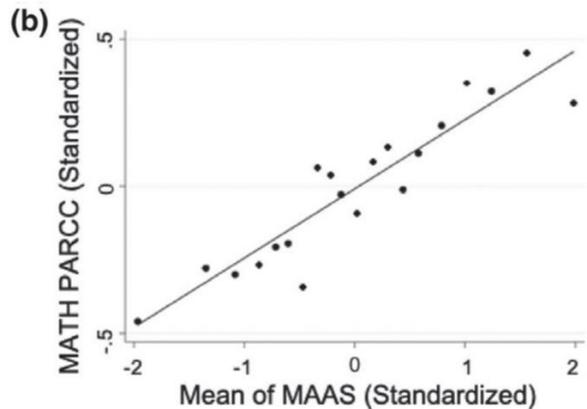
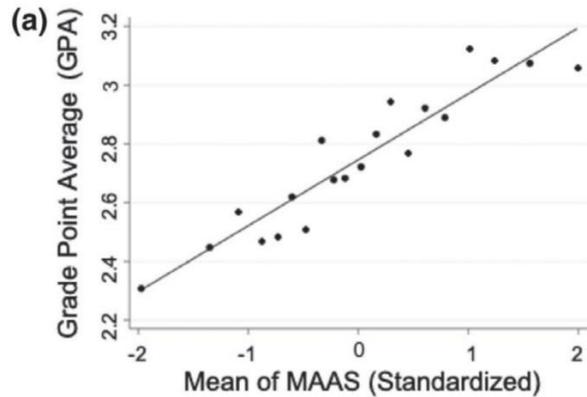
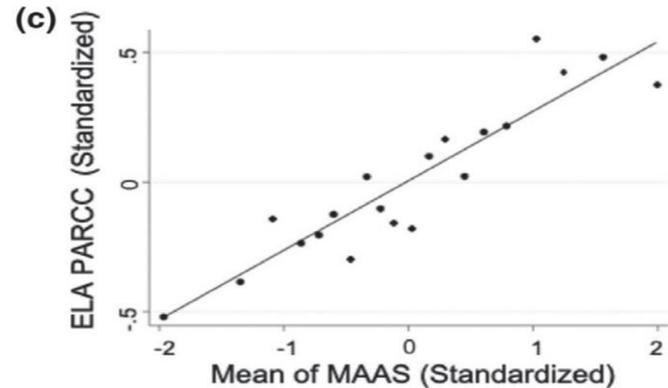


Fig. 1. Relationship between mindfulness and academic outcomes: (a) Mindful Attention Awareness Scale (MAAS) and grade point average, (b) MAAS and mathematics Partnership for Assessment of Readiness for College and Career (PARCC), (c) MAAS and English language arts PARCC. *Note:* Each data point represents the average of the relevant outcome among students within 20 equally sized (five percentile point) intervals of the MAAS variable; the regression lines show the linear relationship between MAAS and each outcome variable in the individual-level data. Charts created using the binscatter command developed by Michael Stepler.



MINDFUL PRACTICE AND CREDIT REQUIREMENTS FOR GRADUATION IN LEADING UNIVERSITIES WORLDWIDE



TEACHERS COLLEGE
COLUMBIA UNIVERSITY

MINDFULNESS UNIVERSITIES

University of Miami

Princeton University

Harvard University Health Services

The University of Vermont

University of New Hampshire

Santa Clara University

Georgetown University

University of San Francisco

Clemson University

University of Redlands

University of Massachusetts Medical School

Columbia University

The University of Missouri

Maharishi University of Management

University of Michigan

Naropa University

Loyola University Maryland

University of Washington

Stanford University

University of Oregon

University of Mary Washington

University of Chicago

University of North Dakota

University of Pittsburgh Schools of
the Health Sciences

University of Wisconsin-Madison

New York University

Indiana State University

The Ohio State University

Benefits of mindfulness in college education

- Increased Academic Success
- Improved Mental Health
- Increased Confidence
- Greater Efficiency
- Heightened Focus in Class
- Improved Physical Health
- Better Sleep

MINDFUL PRACTICES ADOPTION IN LEADING ORGANIZATIONS



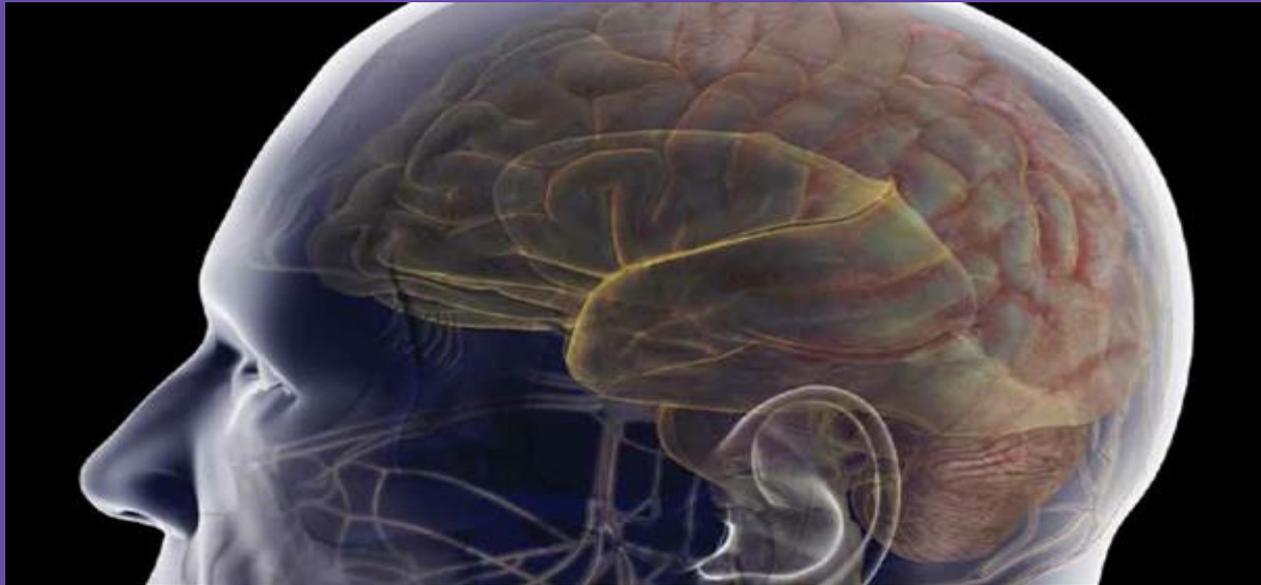
Challenges to Implementing Mindfulness (Discussion)



Discussion Topic

- What are some challenges to Implementing Mindfulness?
- As a group, help each other come up with a solution to these challenges
- share

The Brain on Mindfulness



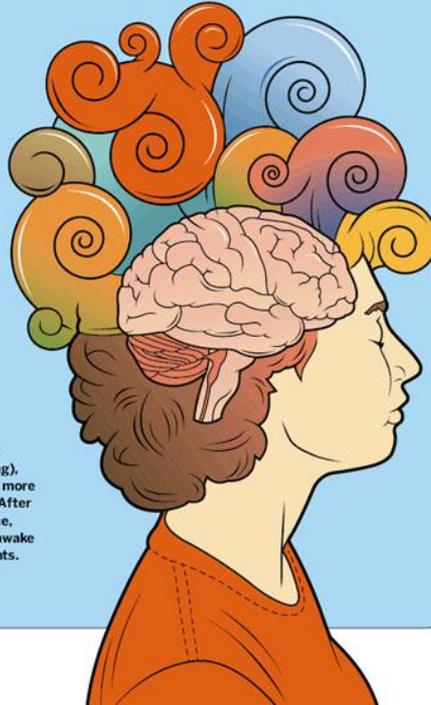
Understand the concept of mind waves

MAKING WAVES

The brain wave spectrum divides into 5 bands with different associated states:

-  DELTA WAVES (δ), ½–4Hz: Deep unconscious, intuition and insight
-  THETA WAVES (θ), 4–8Hz: Subconscious creativity, deep relaxation
-  ALPHA (α) waves, 8–13Hz: "Spacey" and dreamy state, receptive and passive
-  BETA (β) waves, 13–30Hz: Conscious thought, external focus
-  GAMMA (γ) waves, 30–100Hz: Not well understood, but linked to perception and alertness or anxiety

During successful meditation, the subject typically starts off with high beta (thinking), then experiences more alpha, followed by more theta and finally delta, the deepest level. After some time, the reverse process takes place, bringing the person back to beta feeling awake and refreshed, sometimes with new insights.



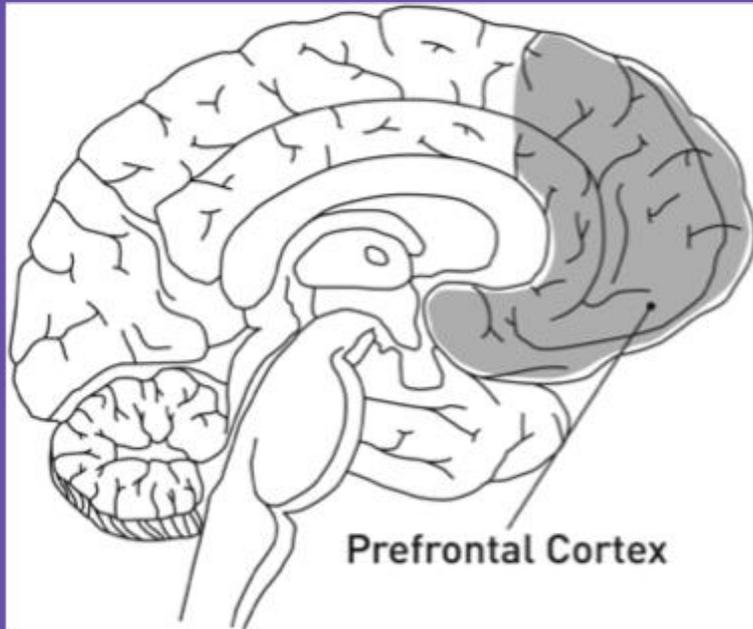
a clinical viewpoint

- Mindfulness-Based Stress Reduction (MBSR) has shown efficacy for many psychiatric and physical conditions and also for healthy subjects, Mindfulness-Based Cognitive Therapy (MBCT) is mainly efficacious in reducing relapses of depression in patients with three or more episodes, Zen meditation significantly reduces blood pressure and Vipassana meditation shows efficacy in reducing alcohol and substance abuse in prisoners.
- *A. Chiesa* and A. Serretti*
- *Institute of Psychiatry, University of Bologna, Italy*

Mind-Brain Interaction

- **As your brain changes, your mind changes: As your mind changes, your brain changes.**
- Immaterial mental activity (mindfulness) maps to material neural activity.
- This produces temporary changes in your brain and lasting ones.
- *Temporary* changes include:
 - Alterations in brainwaves (= changes in the firing patterns of synchronized neurons)
 - Increased or decreased use of oxygen and glucose □ Ebbs and flows of neurochemicals
- These changes resulting from mindfulness practice are **called Self-Directed Neuroplasticity**
- *Summit for Clinical Excellence October 29, 2011*
- **Rick Hanson, Ph.D.**

MINDUP™ - THE HAWN FOUNDATION



“When we are calm and peaceful, the filter is wide open and information flows to the prefrontal cortex, where the brain’s so-called executive functions take place.”

*Book: The MindUP Curriculum:
Grades 6-8: Brain-Focused
Strategies for Learning-and Living*



.b

Curriculum

Research proves that hippocampus of taxi cab drivers in London is larger than average human size due to excessive use for navigation. This proves that the shape of the brain changes based on how we use it.

The Limbic system

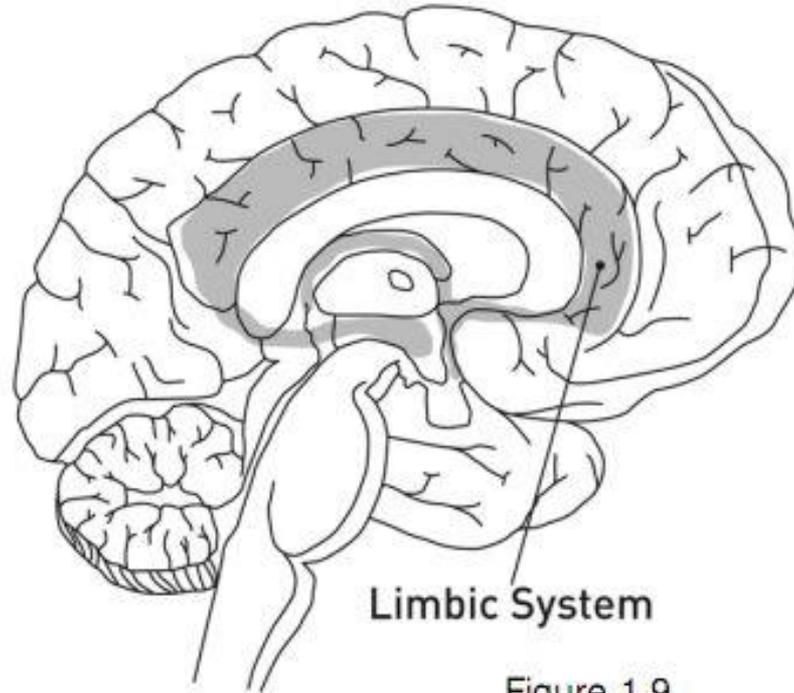
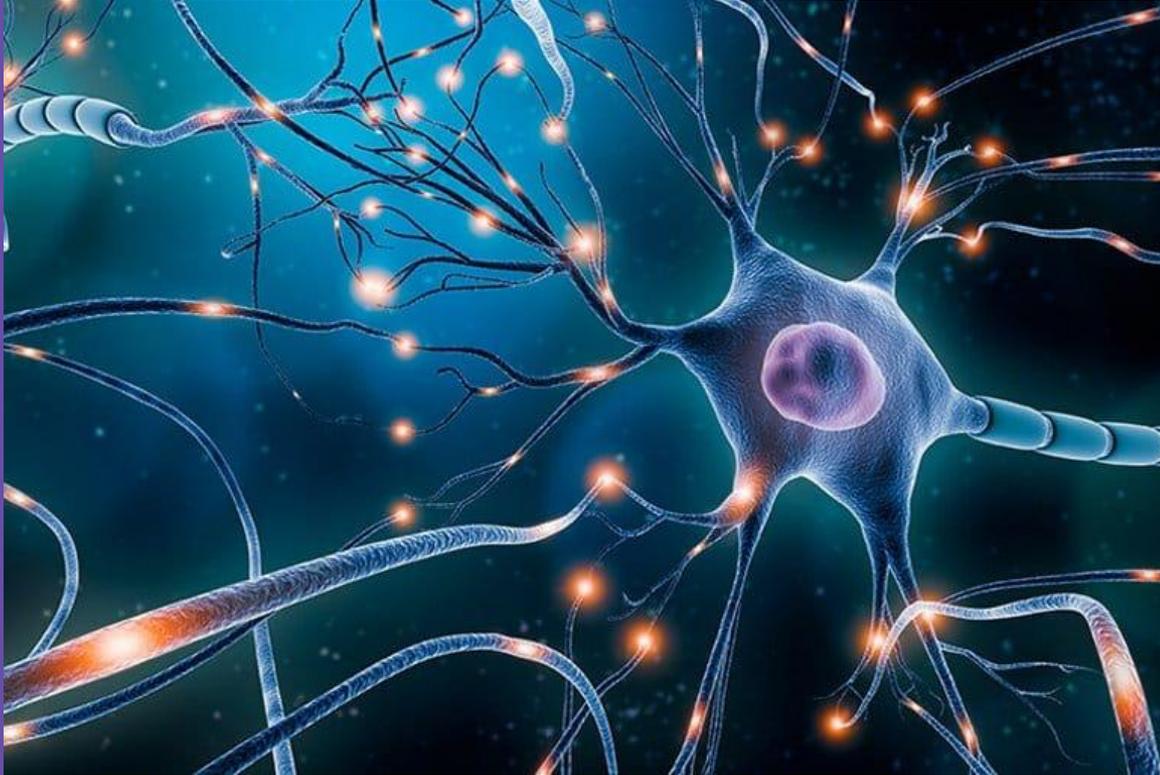


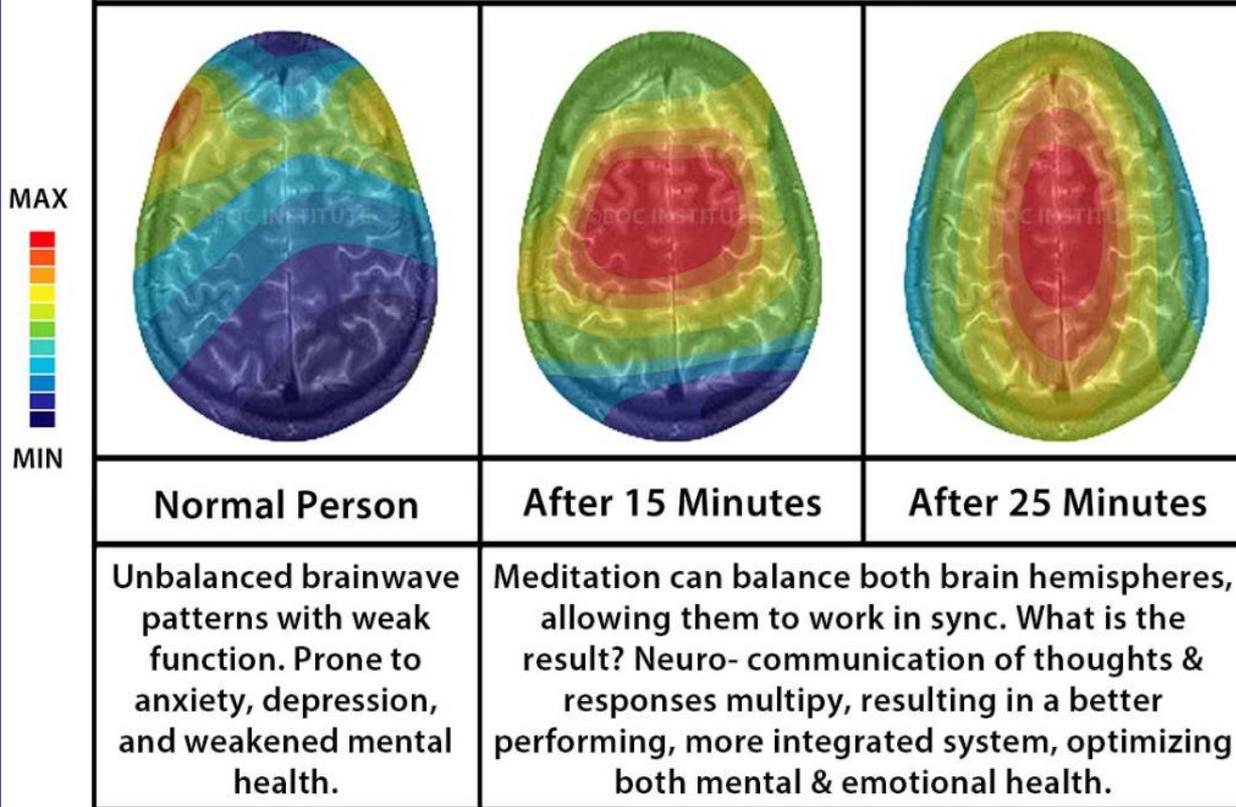
Figure 1.9

Neuroplasticity



Neurons
that fire
together
wire
together

Illustration - Before and After Brainwave Synchronization



MAX

 MIN

Guideline for Teaching Mindfulness

GUIDELINES FOR Teaching Mindfulness

*Understand
mindfulness
through
neuroscience*

TIME

The Science of MEDITATION

The Meditating Brain Meditation Training Wave Change

Calming the Mind

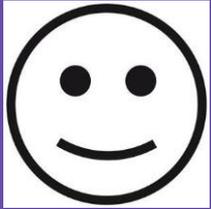
Meditation is an ancient discipline, but scientists have only recently developed tools sophisticated enough to see what goes on in your brain when you do it.
Roll over the numbers to find out more

Cortex 1 Cortex 2
Hypothalamus
Pituitary gland
Temporal lobe 4 Occipital lobe
Cerebellum

Roll Over For Credits

FROM THE AUGUST 4, 2003 ISSUE OF TIME MAGAZINE; POSTED SUNDAY, JULY 27, 2003

GUIDELINES FOR Teaching Mindfulness



Happy

Peaceful

+ Mind Waves
equals
+ Energy



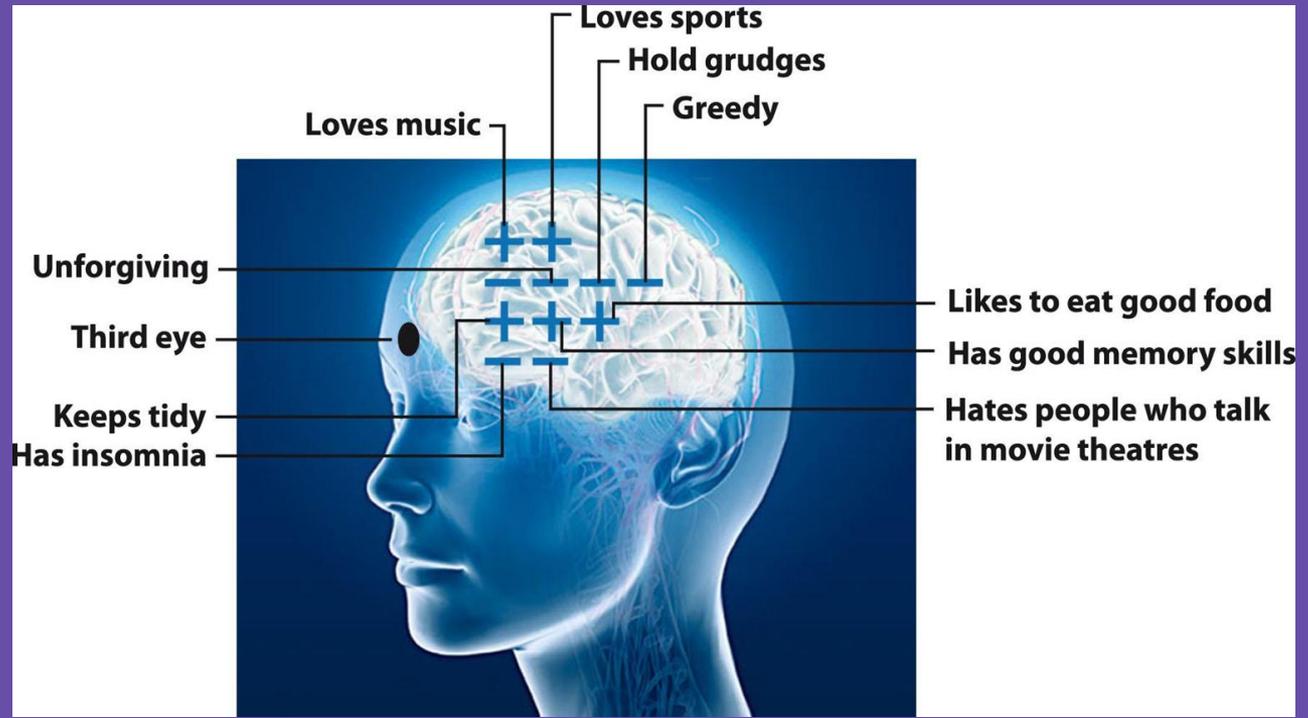
Sad

Anxious

- Mind Waves
equals
- Energy

GUIDELINES FOR Teaching Mindfulness

Be aware of your personality traits



Keys Towards Transformation

1. Practice mindful breathing for ten minutes a day everyday
2. (Optional) Write an email to gift@asb.ac.th to share your experience and get feedback

GUIDELINES FOR Teaching Mindfulness



- Adopt a daily routine of self practice. Aim for 10 minutes a day. If that's too much, do 1 minute per day and work your way up. Consistency is key.
- Try to avoid teaching mindfulness to students when one is feeling stressed or anxious.
- Keep a consistent practice with the students. Mindfulness is a skill that needs to be practiced. Aim for at least once per week.
- Find a group to practice mindfulness with. Aim for once a week.

NORMS IN MINDFULNESS

NON-JUDGMENTAL ATTITUDE

WE EXERCISE UNCONDITIONAL POSITIVE REGARDS FOR ONESELF AND OTHERS

WE DO NOT PLACE JUDGMENT ON YOUR PERSONAL PRACTICE

WE EXERCISE CONSTRUCTIVE CRITICISM FOR SELF-IMPROVEMENT AND STUDENT LEARNING

Trauma

Disclaimer: All the information presented about Polyvagal Theory are work of credible scientists, clinical psychologists, and professional organizations through available online resources. Each table, charts, videos, and graphics contains citations from their original sources.

Why Polyvagal Theory?

When a person feels numb, disconnected, and anxious from trauma, understanding polyvagal theory can help him or her find safety and reconnect with others through social engagement.

It helps us understand how to overcome trauma, stress, anxiety and reactivate social engagement from a biological and physiological perspectives.

Dr. Steven Porges

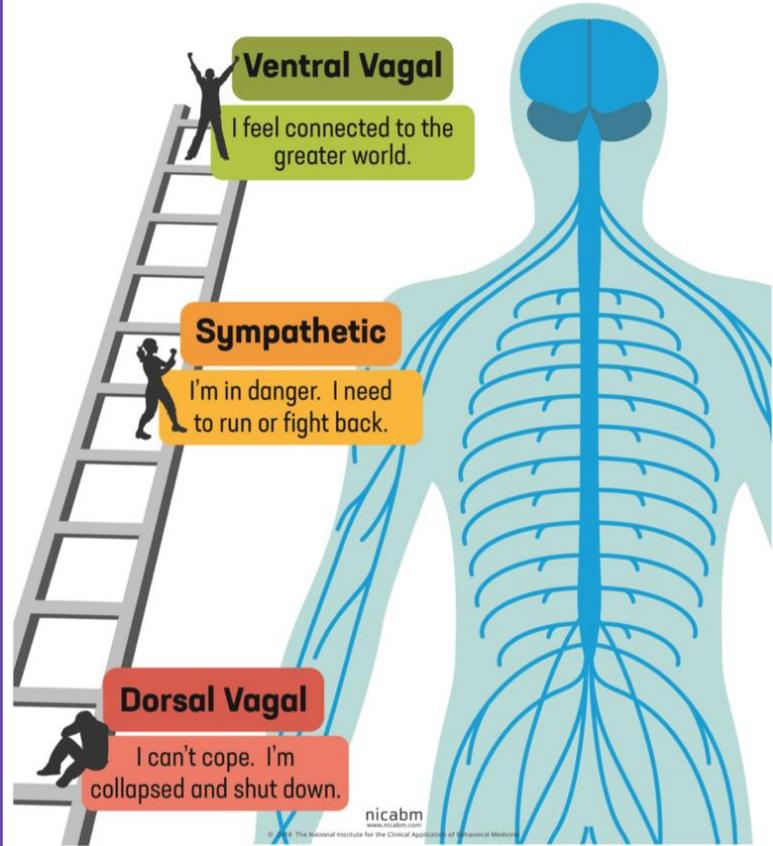


Stephen W. Porges, Ph.D. is Distinguished University Scientist at Indiana University where he is the founding director of the Traumatic Stress Research Consortium. He is Professor of Psychiatry at the University of North Carolina, and Professor Emeritus at both the University of Illinois at Chicago and the University of Maryland. He served as president of the Society for Psychophysiological Research and the Federation of Associations in Behavioral & Brain Sciences and is a former recipient of a National Institute of Mental Health Research Scientist Development Award.

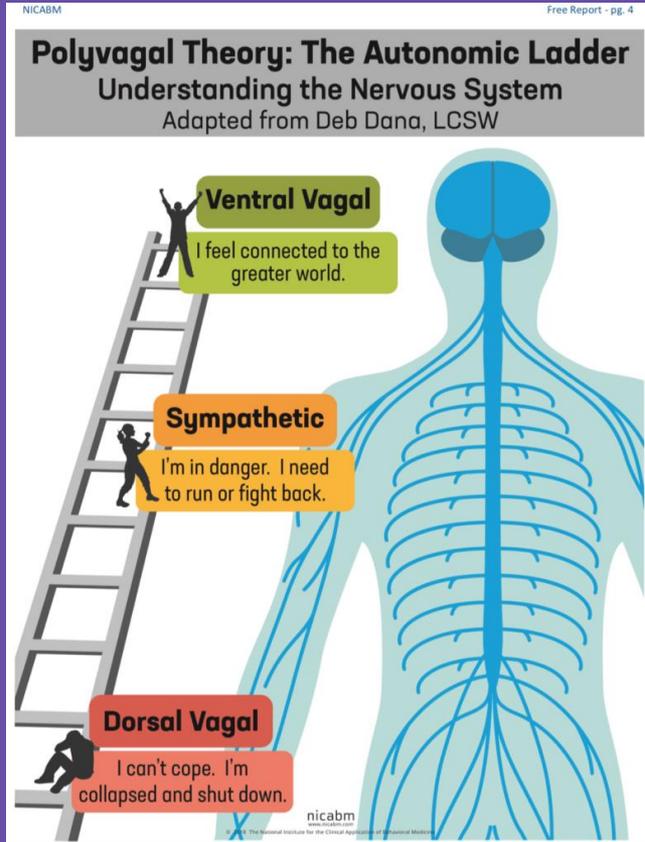
Polyvagal Theory: The Autonomic Ladder

Understanding the Nervous System

Adapted from Deb Dana, LCSW



Effects of Body Scan or Total Relaxation (Bottom UP Approach)



1. If you practice body scan starting with your feet and work your way upward, you are releasing your body from numbness, stiffness which releases you from your dorsal vagal.
2. If you pay attention to your feelings (center of your chest) you are releasing your body from the fright and freeze modes which releases you from sympathetic defense mode.
3. If you are released from the dorsal and sympathetic defense modes, you can activate your ventral vagal which allows you to experience social engagement, empathy, and compassion.

Other Mindful Activities

- Walking Meditation
- Mindful Coloring
- Mindful Eating
- Mindful Listening
- Loving-Kindness Meditation
- Pulse Check
- Total relaxation



Final Reflection

In your group, draw a summary for everything that you've learned today. (Do not use any words)



Thank you

