Think not lightly of good, saying, "It will not come to me."

Drop by drop is the water pot filled.

Likewise, the wise one,
gathering it little by little,
fills oneself with good.

Dhammapada 9.122
The Professional Course: In Positive Neuroplasticity

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The Wellspring Institute For Neuroscience and Contemplative Wisdom
Foundations
What Is Positive Neuroplasticity?

The deliberate internalization of beneficial experiences in implicit memory

Informally called “taking in the good”
Welcome to the Professional Course

Aims

- Deepen embodiment of positive neuroplasticity (PN)
- Understand theory and have practical skills
- Deepen supportive qualities
- Use PN with others, typically in occupational settings

Methods

- Internal paractice, trying methods with a partner, small group discussion, whole group lecture and discussion
- Presumed capabilities to work with others, give and get feedback skillfully, and basic understanding of PN

Questions?
Who Is Here?

- Therapists and counselors?
- Coaches?
- Mindfulness trainers?
- Healthcare providers?
- Business consultants?
- Managers?
- Parents?
- Educators?
- Yoga teachers?
- Bodywork providers?
Let’s Practice

Centering and grounding yourself

Accepting your inner world as it is

Opening to and taking in a growing sense of:

• Peace
• Contentment
• Love
Pick a partner and choose an A and a B (A’s go first). Then take turns, with one partner speaking while the other person listens. I’ll explain how you’ll switch roles.

Imagine that you have just done the Positive Neuroplasticity Training and you are telling an interested friend or colleague about it.

Who does not know about PNT and asks you these questions (~ 2 min. each) . . .
Could You Tell Me . . . ?

1. In a nutshell, what was it about?
2. What did you gain personally?
3. How can you use your mind to change your brain?
4. Will this get you attached to happy moments?
5. What’s this HEAL process? (4 min.)
6. Why is the 4th step optional?
7. Can you use this approach for any special needs?
8. Are there risks or cautions?
How was that?

What was easy to explain?

What was harder?
Growing Strengths
Examples of Inner Strengths?

- Understandings
- Capabilities
- Positive emotions
- Attitudes
- Motivations
- Virtues
Move around the room, interacting briefly with others, one person at a time.

One person says: “One strength in me is X.”
The other person says: “I recognize X in you.”

Then switch roles.

Then find another person and do it again.

→ Keep it real. And take it in.
Move around the room, interacting briefly with others, one person at a time.

First person: “One strength I’m developing is X.”
Second person: “How are you developing X?”
First person: “I’m developing X by ________ .”

Then switch roles.

Then find another person and do it again.

→ Keep it real. And take it in.
Challenges, Vulnerabilities, Strengths

How was that?

Course over time = Challenges + Vulnerabilities + **Strengths**

What *inner* strengths would help with:

- Anxiety
- Feeling hurt
- Addictions
- Needing to assert yourself
Cultivation De-fuels Craving

- It is wholesome to wish for the happiness and welfare of all beings - including yourself.

- We rest the mind upon positive states so that the brain may gradually take their shape. This disentangles us from craving as we increasingly rest in a peace, contentment, and love that is independent of external conditions.

- With time, even the practice of cultivation falls away – like a raft that is no longer needed once we reach the farther shore.
We will soon form “pods,” groups of 3-5 people. We’ll start with pods containing diverse interests, and then see later if we should form special interest pods.

In your pod, address one question one person at a time, then do next question:

• Background, intended applications of PN – and how do you feel about being open here among peers?
• What is profound about PN?
Group Discussion

What is profound about positive neuroplasticity?
What Is Profound about PN? (1)

- Receptive intimacy with experiencing
- Recognizing the beneficial in experience
- Recognizing good facts all around
- Courage to change and be changed
- Benevolence toward yourself
- Autonomy inside your own mind – especially when pushed by forces
- Self-reliance; don’t need therapeutic authorities
What Is Profound about PN? (2)

- Recognizing challenges and suffering – for which we need inner strengths
- Appreciating soft longing heart of others
- Opportunities for rapid success, positive feedback
- Undoing underlying causes of “craving”
- “Cultural disobedience”
- Radical receptivity while letting go
- Gentle mastery in experiencing
Review of HEAL [background]
In the Garden of the Mind

1. Be with what is there
2. Decrease the negative
3. Increase the positive

Let be. Let go. Let in.

Mindfulness is present in all three.
“Being with” is primary – but not enough.
We also need wise effort: releasing & resourcing.
Learning – changing neural structure and function – has two stages:

- From state to trait
- From activation to installation
- From short-term memory buffers to long-term storage
Inner strengths are grown from experiences of them or related factors – activated states – that are installed as traits.
Positive Neuroplasticity – How to Take in the Good: HEAL

Activation
1. **Have** a beneficial experience.

Installation
2. **Enrich** it.

3. **Absorb** it.

4. **Link** positive and negative material. [optional]
Have a Beneficial Experience
Absorb It
Link Positive and Negative Material
Have It, Enjoy It
Using HEAL with Others
Resources for HEAL

- Intention; willing to feel good
- Identified target experience
- Openness to the experience; embodiment
- Mindfulness of the HEAL steps to sustain them
- Working through blocks
The Four Ways to Offer a Method

- Doing it implicitly
- Teaching it and leaving it up to the person
- Doing it explicitly with the person
- Asking the person to do it on his or her own
Using HEAL in Trainings

- Take a few minutes to explain its rationale and teach it explicitly.

- In the flow, occasionally encourage enriching and absorbing, using natural language.

- Tell people they can use HEAL outside of class to deepen internalization of what they’re learning.

- Don’t use HEAL when it’s inappropriate (e.g., radically choiceless awareness, highly self-critical about any kind of performance).
Synergies of HEAL and Mindfulness

- Improved mindfulness enhances HEAL.
- HEAL increases factors of mindfulness (e.g., executive functions, self-compassion, determination, distress tolerance).
- HEAL heightens learning from mindfulness:
  - The sense of stable presence itself
  - Disidentifying from reactions
  - Deepening centeredness
  - Insight into nature of experience
A Demonstration

- A volunteer? Briefly: what’s the issue?

- I’ll focus on resourcing; with more time, there’d be more inclusion of letting be and letting go.

- Potential key points:
  - Natural process of many choices along the way
  - Getting to the challenge as it’s experienced
  - Identifying useful state(s)/trait(s); picking one(s) that is/are accessible
  - Slowing it down; encouraging embodiment
  - Linking when it feels right
Skills with “Noticing”
Have a Good Experience
The Two Ways To Have a Beneficial Experience

**Notice** one you are already having.
- In the foreground of awareness
- In the background

**Create** one.
It is remarkable that there are always beneficial aspects of ongoing experience.

There are always opportunities for internalizing beneficial experiences.
Elements of Experience

- **Thought** – belief; perspective; expectation; image; memory; idea

- **Perception** – sensation (e.g., relaxation, vitality); sight; sound; taste; smell

- **Emotion** – feeling; mood

- **Desire** – want; wish; hope; value; drive; motivation; purpose; dream; passion; determination

- **Action** – behavior; posture; knowing how to
Pick a partner and choose an A and a B (A’s go first). Then take turns, with one partner speaking while the other person listens. Go all the way through (~ 10 minutes) and then switch roles.

A’s choose one or more beneficial experiences. B’s, help A’s identify the five aspects of experience: 

- thoughts
- perceptions
- emotions
- desires
- actions

As a bonus, you can take in these aspects of experience as you identify them.
Elements of Experience

- **Thought** – belief; perspective; expectation; image; memory; idea

- **Perception** – sensation (e.g., relaxation, vitality); sight; sound; taste; smell

- **Emotion** – feeling; mood

- **Desire** – want; wish; hope; value; drive; motivation; purpose; dream; passion; determination

- **Action** – behavior; posture; knowing how to
Skills with “Creating”
How to Create A Beneficial Experience

Look for good facts in:
1. Immediate situation
2. Current or recent events
3. Stable conditions
4. Your character
5. The past
6. The future
7. Bad situations
8. The lives of others
9. Your imagination
10. Care about others
11. Directly evoke a beneficial experience
12. Produce good facts
13. Share about good facts with others
Most of these involve
(1) recognizing good facts and
(2) having a good experience.

Both are challenging for many people.
Turning a Good Fact Into a Good Experience

- Bring awareness to your body.

- Soften and open yourself.

- Be a little active in your mind, recognizing aspects of the good fact that naturally elicit an experience.

- Imagine how another person might naturally feel in response to the good fact.

- Have kindness for yourself, encouraging yourself to have a beneficial experience.
Find a partner, pick A and B. Go back and forth about each type of good fact (~ 90 sec. each), then on to the next type:

1. Immediate situation
2. Current or recent events
3. Stable conditions
4. His or her character
5. The past
6. The future
7. Bad situations
8. The lives of others
Helping People with Blocks
Reflections on “Blocks”

- Blocks = mental factors that reduce, derail, inhibit, or defend against mental activities that would be beneficial for a person.

- Blocks are not bad. They are normal, a means of coping, often a “solution” that once made sense but is now a “problem.”

- Explore the benefits, payoffs, functions, purpose of the block. “Join with the defense.”

- Then see if there might be better ways to accomplish the same purpose.
Blocks to Any Inner Practice

- Distractibility
- Out of touch with experience
- Uncomfortable bringing attention inward
- Over-analyzing, pulling out of the experience
Blocks to Taking in the Good

- It’s hard to receive, even a good experience
- Concern you’ll lose your edge; fear you’ll lower your guard
- Idea that feeling good is disloyal or unfair to those who suffer
- Belief you don’t deserve to feel good
- Not wanting to risk disappointment
- As a woman, socialized to make others happy, not yourself
- As a man, socialized to be stoic and not care about feelings
- You’ve been punished for being energized or happy
- Good things in you have been dismissed
- Positive experiences associate to negative ones
- “What’s the point in feeling good, bad things will still happen”
- Payoffs in not feeling good
- Not wanting to let others off the hook
- TG is craving that leads to suffering
A Demonstration

A volunteer? Briefly: what’s the block?

Potential key points:

- There’s often poignance about the block: the pain it’s been managing, how hard life has been. Sometimes the block becomes a major clinical focus.
- Being attentive to: “you don’t get it; easy for you to say; yes, but; I’m afraid to try something different”
- Identifying the dreaded experience the block prevents; finding and installing resources to risk or cope with it
- Identifying problematic beliefs; finding and installing new, true, and useful beliefs
- Being matter-of-fact, normalizing
Return to your pods.

One person at a time, pick a block that is personally or professionally relevant. As a group, discuss ways to help with it.

Then the next person, usually with a different block.

➔ When it’s your turn, you’re in charge.
Skills with Installing
Enrich It
Factors of Enriching

- **Duration** – 5+ seconds; protecting it; keeping it going
- **Intensity** – opening to it in the mind; helping it get big
- **Multimodality** – engaging multiple aspects of experience, especially perception and emotion
- **Novelty** – seeing what is fresh; “don’t know mind”
- **Salience** – seeing why this is personally relevant
What questions do you have about:

Duration?
Intensity?
Multimodality?
Novelty?
Salience?
Absorb It
Absorbing an Experience

- **Enriching** makes the experience more powerful. **Absorbing** makes memory systems more receptive by priming and sensitizing them (e.g., dopamine).

- Intend and sense the experience is sinking into you.
  - Imagery – Water into a sponge; golden dust sifting down; a jewel into the treasure chest of the heart
  - Sensation – Warm soothing balm

- Giving over to the experience; letting it change you

- Letting go of resisting, grasping, clinging: “craving”
Pick a partner and choose an A and a B (A’s go first).

B’s, tell your partner about an important beneficial experience for you.
A’s, take your partner through the first three steps of HEAL.
B’s tell A’s what worked well in what they did.
(Take it in!) Then switch roles.

Then find another partner and repeat.
The Importance of Installation
Without **installation**
there is no learning,
no change in the brain.

Activation without installation
is pleasant,
but has no lasting value.
The same research that proves therapy works shows no improvement in outcomes over the last 30 or so years.

Scott Miller
What fraction of your own beneficial mental states ever become neural structure?

What fraction of your clients’ or students’ beneficial mental states ever become neural structure?
Return to your pods.

Have a general discussion of:
• Challenges to installation in your settings
• Approaches for increasing installation

→ Make sure everyone gets to talk.
Benefits of Positive Neuroplasticity [background]
It’s Good to Take in the Good

- Development of specific inner strengths
  - General - resilience, positive mood, feeling loved
  - “Antidote experiences” - Healing old wounds, filling the hole in the heart

- Implicit benefits:
  - Shows that there is still good in the world
  - Being active rather than passive
  - Treating yourself kindly, like you matter
  - Rights an unfair imbalance, given the negativity bias
  - Training of attention and executive functions

- Sensitizes brain to positive: like Velcro for good
Keep a green bough in your heart, and a singing bird will come.

Lao Tsu
Research on the HEAL Process

- With collaborators from the University of California, a 2013 study on the HEAL course, using a randomized waitlist control group design (46 subjects).

- Course participants, compared to the control group, reported more Contentment, Self-Esteem, Satisfaction with Life, Savoring, and Gratitude.

- After the course and at two month follow-up, pooled participants also reported more Love, Compassion, Self-Compassion, Mindfulness, Self-Control, Positive Rumination, Joy, Amusement, Awe, and Happiness, and less Anxiety and Depression.
Combined Sample:
Depression (BDI) & Anxiety (BAI)

Mean Score

Pre-Course | Post-Course | 2-Months Later

BDI

BAI
Experience-Dependent Neuroplasticity
[background]
First, respect for mystery.
The brain is wider than the sky,
For, put them side by side,
The one the other will include
With ease, and you beside.

Emily Dickinson
We ask, “What is a thought?”

We don’t know,

yet we are thinking continually.

Venerable Tenzin Palmo
Second, the hardware.
Your Brain: The Technical Specs

- **Size:**
  - 3 pounds of tofu-like tissue
  - 1.1 trillion brain cells
  - 85 billion “gray matter” neurons

- **Activity:**
  - Always on 24/7/365 - Instant access to information on demand
  - 20-25% of blood flow, oxygen, and glucose

- **Speed:**
  - Neurons firing around 5 to 50 times a second (or faster)
  - Signals crossing your brain in a tenth of a second

- **Connectivity:**
  - Average neuron makes ~ 5000 connections with other neurons:
    ~ 500 trillion synapses
A Neuron

- Dendrite
- Soma (cell body)
- Nucleus
- Axon terminal button
- Axon
- Myelin sheath
A SYNAPSE

Axon Terminal

Presynaptic membrane
neurotransmitter released by exocytosis

Mitochondrion
produce ATP

Synaptic vesicles
contain neurotransmitter

Postsynaptic membrane
has receptors for neurotransmitters

Synaptic Cleft

Dendrite of second neuron
Third, the mind.

What’s the purpose of all this hardware?
All cells have specialized functions. Brain cells have particular ways of processing information and communicating with each other. Nerve cells form complete circuits that carry and transform information.

Electrical signaling represents the language of mind, the means whereby nerve cells, the building blocks of the brain, communicate with one another over great distances. Nerve cells generate electricity as a means of producing messages.

All animals have some form of mental life that reflects the architecture of their nervous system.

Eric R. Kandel
Apart from the hypothetical influence of a transcendental X factor . . .

Awareness and unconsciousness, mindfulness and delusion, and happiness and suffering must be natural processes.

Mind is grounded in life.
Mental activity entails underlying neural activity.
Rewards of Love
Repeated mental activity entails repeated neural activity.

Repeated neural activity builds neural structure.
Neurons that fire together, wire together.
INNER STRENGTHS ARE BUILT FROM BRAIN STRUCTURE
We can use the mind
To change the brain
To change the mind for the better
To benefit ourselves and other beings.
The Negativity Bias
[background]
Negative Experiences In Context

- Negative about negative → more negative

- Some inner strengths come only from negative experiences, e.g., “stress inoculation.”

- But negative experiences have inherent costs, in discomfort and stress.

- Could an inner strength have been developed without the costs of negative experiences?

- Many negative experiences are pain with no gain.
The Brain’s Negativity Bias

As our ancestors evolved, “sticks” generally had more urgency and impact than “carrots.”

As one major feature of the brain:

1. We scan for bad news.
2. Over-focus on it, losing sight of the whole
3. Over-react to it (e.g., brain, loss aversion)
4. Install it rapidly in implicit memory (e.g., negative interactions, learned helplessness)
5. Sensitize the brain to the negative
6. Create vicious cycles
The brain is good at learning from bad experiences but bad at learning from good ones.

Even though learning from good experiences is the primary way to grow psychological resources.
The installation of beneficial experiences is worth doing in its own right.

The negativity bias adds another reason: to compensate for our over-learning from the negative.
Key Resource Experiences
We have three needs, managed by three systems, linked to three layers of the brain, evolved in three stages.

The three systems have two settings.

One practice pulls us out of the red zone and deepens our roots in the green zone.

Any questions?!
RESOURCES FOR AVOIDING HARMs

Challenge
Weakness
Helplessness
Freezing, immobilization
Inflated threats
Alarm
Tension
Worry, fear
Irritation, anger

Resource
Strength
Agency
Action, venting
Accurate appraisal
Protection, calming
Relaxation
Feeling alright now, making a plan
Big picture, peace
<table>
<thead>
<tr>
<th>Challenge</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>What I don’t have</td>
<td>What I do have</td>
</tr>
<tr>
<td>Scarcity</td>
<td>Enoughness, fullness</td>
</tr>
<tr>
<td>Disappointed, sad</td>
<td>Gratitude, gladness</td>
</tr>
<tr>
<td>Frustration, failure</td>
<td>Accomplishment</td>
</tr>
<tr>
<td>Bored, numb</td>
<td>Pleasure, excitement</td>
</tr>
<tr>
<td>Grief</td>
<td>Loved and loving</td>
</tr>
<tr>
<td>Giving up</td>
<td>Aspire, lived by good</td>
</tr>
<tr>
<td>Drivenness</td>
<td>Already satisfied</td>
</tr>
<tr>
<td>Challenge</td>
<td>Resource</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Left out, excluded</td>
<td>Belonging, wanted</td>
</tr>
<tr>
<td>Inadequacy, shame</td>
<td>Appreciated, respected</td>
</tr>
<tr>
<td>Ignored, unseen</td>
<td>Receiving empathy</td>
</tr>
<tr>
<td>Lonely</td>
<td>Friendship, caring to others and oneself</td>
</tr>
<tr>
<td>Resentment</td>
<td>Recognize it hurts you</td>
</tr>
<tr>
<td>Envy, jealousy</td>
<td>Self-compassion, take action, good will</td>
</tr>
<tr>
<td>Feeling stifled</td>
<td>Skillful assertiveness</td>
</tr>
</tbody>
</table>
Questions for Identifying Resources

- What would have made all the difference in the world – in your childhood, first job, last relationship, etc.? (Focus on the experience of state or trait that would have resulted from better relationships, settings, events, etc.)

- What does your heart still long for?

- What’s happening inside you when you are in a really good place?

- What’s happening in the mind of someone you know who handles your issue well?
A Demonstration

A volunteer? Briefly: what’s the issue?

I’ll focus on resourcing.

Potential key points:

- Natural process of many choices along the way
- Getting to the challenge as it’s experienced
- Identifying key resource(s); picking one(s) that is/are accessible
- Slowing it down; encouraging embodiment
- Linking when it feels right
Find a partner, pick an A and a B.

A’s guide B’s: What is an external challenge? What is a key inner strength that could help? How could you have and take in experiences of it in your life?

A’s guide B’s through HEA steps for this strength.

B’s tell A’s what worked.

Switch roles.
Find a new partner, pick an A and a B.

A’s guide B’s: What is an internal issue? What is a key inner strength that could help? How could you have and take in experiences of it in your life?

A’s guide B’s through HEA steps for this strength.

B’s tell A’s what worked.

Switch roles.
Skills with “Linking”
A quick review . . .
Link Positive and Negative Material
What is “negative material?”

Painful, harmful thoughts, perceptions, emotions, desires, and actions

Foreground of awareness
Background of awareness
Unconscious
How Linking Works

- Activated negative material associates to whatever is also present in awareness.

- When negative material leaves awareness, these associations are reconsolidated in memory.

- This means that positive material can soothe, ease, put in perspective, and even replace negative material.

- Examples: pain held in spacious awareness; telling a friend about a problem; self-compassion for an upset; feeling cared about alongside feeling hurt
Conditions for the Link Step

- Divided awareness; holding two things at once
- Not hijacked by negative; if so, drop negative
- Positive material is more prominent in awareness.
Degree of Engagement with Negative

- The **idea** of the negative material
- A **felt sense** of the negative material
- The positive material **goes into** the negative material (e.g., soothing balm, filling up hollow places, connecting with younger layers of the psyche).

→ Throughout, the positive material remains more prominent in awareness.
Skills with the 4th Step

- Be on your own side; you want the positive to win. Perhaps imagine inner allies with you.

- Be resourceful. It’s OK to be creative, even playful.

- If the negative gets too strong, drop it; return to positive.

- Get a sense of receiving the positive into the negative.

- End with just the positive.

- Start with positive or negative material.
Pick a partner, choose an A and a B (A’s go first). Take turns, with one partner guiding the other one through HEAL, especially the Link step.

Before starting, clarify the positive and (mild to moderate) negative material.

Next, do HEAL, about 10 minutes total.

Then debrief a few minutes, and switch roles.
How was that?

What went well?

What questions do you have?
Using HEAL in Psychotherapy
These considerations for therapists will be useful for nearly anyone using HEAL with others.
Implicit HEAL in Therapy

- Creating space for beneficial experiences
- Drawing attention to beneficial facts
- Encouraging positive experience of beneficial fact
- Drawing attention to key aspects of an experience
- Slowing the client down; not moving on
- Linking rewards to desired thoughts and actions
- Modeling taking in the good oneself
Explicit HEAL in Therapy

Teaching the method

- Background helps about brain, negativity bias
- Emphasizing facts and mild beneficial experiences
- Surfacing blocks and working through them

Doing HEAL with client(s) during a session

- To reinforce a key resource state
- To link rewards to desired thoughts or actions

Encouraging HEAL between sessions

- Naming occasions
- Identifying key beneficial facts and experiences
Promoting Client Motivation

During therapy and between sessions, HEAL:
- Key resource experiences
- When learning from therapy works well
- When realistic views of you, the world, etc. come true
- Good qualities in yourself
- New insights

Can be formalized in daily reflections, journaling

Risk the “dreaded experience,” notice the (usually) good results, and then take these in.
HEAL and Trauma

- General considerations:
  - People vary in their resources and their traumas.
  - Often the major action is with “failed protectors.”
  - Respect “yellow lights” and the client’s pace.

- The first three steps of HEAL are generally safe. Use them to build resources for tackling the trauma directly.

- Use the Link step to address peripheral features and themes of the trauma.

- With care, use Link to get at the heart of the trauma.
In Couples, Benefits of HEAL

- “Installs” key resources that support interactions (e.g., self-soothing, recognition of good intentions)
- Dampens vicious cycles
- Helps partner feel seen, credited for efforts
- Increases the sense of the good that is present
- Reduces clingingness, pursuing, or reproach that the other person withdraws from
Using HEAL with a Couple

Basic steps (often informal):
- Attention to a good fact
- Evoking and sustaining a good experience
- Managing blocks
- Awareness of the impact on one’s partner
- Debriefing, often from both partners

Pitfalls to avoid:
- Seeming to side with one person
- Unwittingly helping a person overlook real issues
- Letting the other partner pile on
Pick a partner, choose A and B (A’s go first).

Then take turns talking about using HEAL with 2-3 different adults.
Using HEAL with Children
Uses for Children

- Registering curricular skills and other resources
- Motivation for learning; associating rewards
- Seeing the good in the world, others, and oneself – and in the past, present, and future
- Seeing life as opportunity
- Feeling like an active learner
- Developing child-specific inner strengths
Adaptations for Children

- Kids gain from HEAL – particularly mistreated, anxious, spirited/ ADHD, or LD children.

- Style:
  - Be matter of fact: this is mental/neural literacy.
  - A little brain talk goes a long way.
  - Be motivating: name benefits; “be the boss of your own mind.”
  - Down to earth, naturalistic
  - Scaffold based on executive functions, motivation, and need for autonomy.
  - Brief, concrete
Occasions for HEAL with Kids

- Explicit training in positive neuroplasticity
- Natural rhythms in the day (e.g., start of class, after a lesson or recess, end of day)
- When working with an individual child
- When dealing with classroom issues
Pick a partner and choose A and B (A’s go first).

Then take turns talking about using HEAL with children. If HEAL with kids is not relevant to you, just talk about how you could use it with adults.
Wrapping Up
Return to your pods.

One person at a time (~ 5 min. each):
• What did you get out of this training, personally?

• What are some ways you hope to apply what you’ve learned here?
Societal Implications of Positive Neuroplasticity

- For most of the time our human and hominid ancestors have lived, it was not possible to meet the core needs of everyone. But now the resources and know-how exist to do this. How we handle this unprecedented opportunity will be the central theme of this century.

- Improving external conditions is vital – but not enough. Many affluent people dwell in anxiety and anger, frustration and drivenness, and hurt and ill will.

- Repeatedly internalizing Responsive experiences develops a “green brain” that is harder to manipulate with threats and fear, greed and consumerism, and “us” vs. “them” rivalries. A critical mass of “green brains” will bring a tipping point that changes the course of human history.
Coming Home

Peace

Contentment

Love
Think not lightly of good, saying, "It will not come to me."

Drop by drop is the water pot filled.

Likewise, the wise one, gathering it little by little, fills oneself with good.

Dhammapada 9.122
Suggested Books

See www.RickHanson.net for other great books.

Key Papers - 1

See [www.RickHanson.net](http://www.RickHanson.net) for other scientific papers.


Key Papers - 2


- Hanson, R. 2008. Seven facts about the brain that incline the mind to joy. In *Measuring the immeasurable: The scientific case for spirituality*. Sounds True.
Key Papers - 3


Key Papers - 4


Where to Find Rick Hanson Online

**Hardwiring Happiness: The New Brain Science of Contentment, Calm, and Confidence**

www.rickhanson.net/hardwiringhappiness

Personal website: www.rickhanson.net

Wellspring Institute: www.wisebrain.org

youtube.com/drrhanson  facebook.com/rickhansonphd