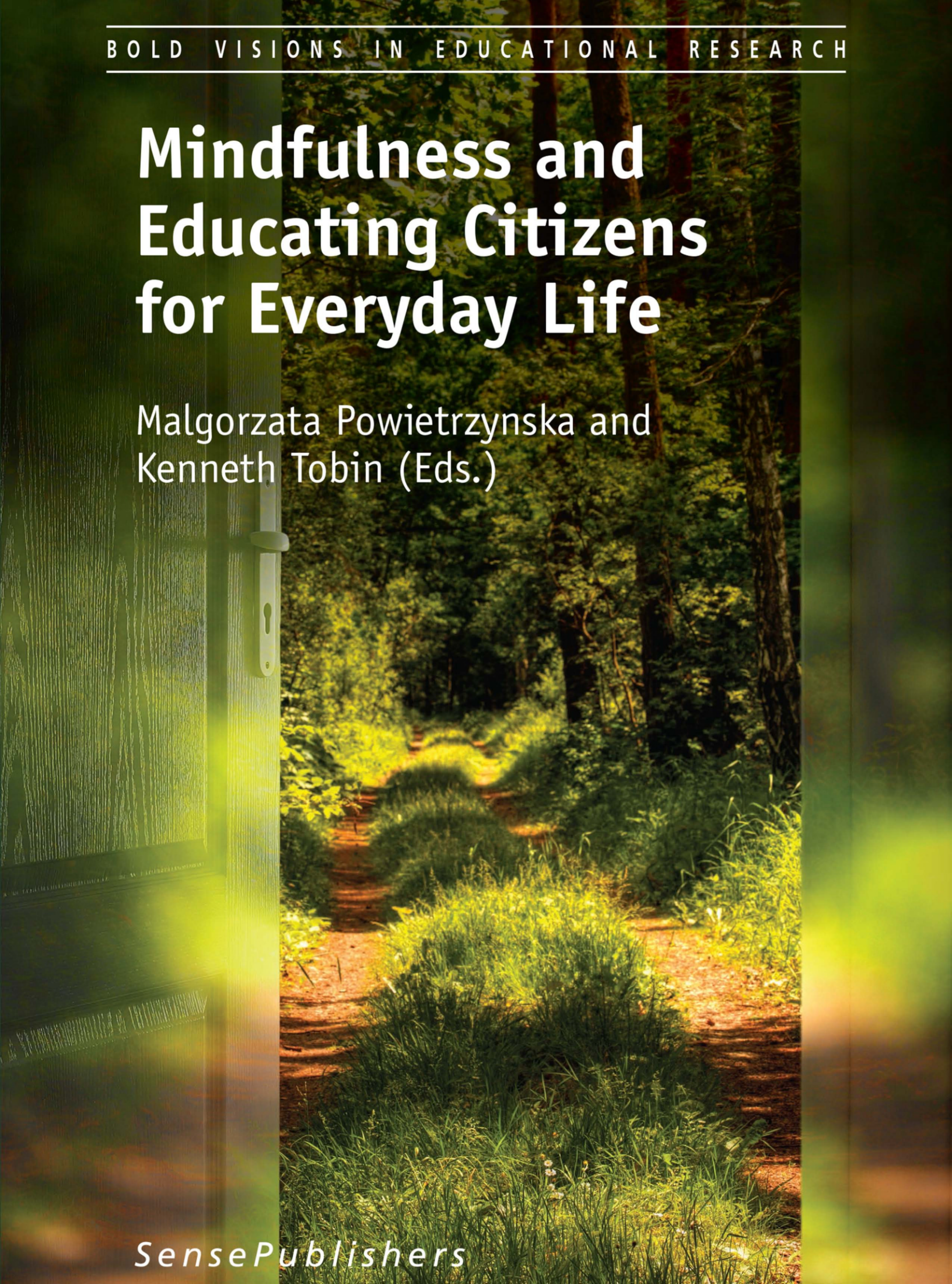
BOLD VISIONS IN EDUCATIONAL RESEARCH

Mindfulness and Educating Citizens for Everyday Life

Malgorzata Powietrzynska and
Kenneth Tobin (Eds.)



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Mindfulness and Educating Citizens for Everyday Life

Bold Visions in Educational Research
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Scope:
Bold Visions in Educational Research is international in scope and includes books from two areas: *teaching and learning to teach* and *research methods in education*. Each area contains multi-authored handbooks of approximately 200,000 words and monographs (authored and edited collections) of approximately 130,000 words. All books are scholarly, written to engage specified readers and catalyze changes in policies and practices. Defining characteristics of books in the series are their explicit uses of theory and associated methodologies to address important problems. We invite books from across a theoretical and methodological spectrum from scholars employing quantitative, statistical, experimental, ethnographic, semiotic, hermeneutic, historical, ethnomethodological, phenomenological, case studies, action, cultural studies, content analysis, rhetorical, deconstructive, critical, literary, aesthetic and other research methods.

Books on *teaching and learning to teach* focus on any of the curriculum areas (e.g., literacy, science, mathematics, social science), in and out of school settings, and points along the age continuum (pre K to adult). The purpose of books on *research methods in education* is **not** to present generalized and abstract procedures but to show how research is undertaken, highlighting the particulars that pertain to a study. Each book brings to the foreground those details that must be considered at every step on the way to doing a good study. The goal is **not** to show how generalizable methods are but to present rich descriptions to show how research is enacted. The books focus on methodology, within a context of substantive results so that methods, theory, and the processes leading to empirical analyses and outcomes are juxtaposed. In this way method is not reified, but is explored within well-described contexts and the emergent research outcomes. Three illustrative examples of books are those that allow proponents of particular perspectives to interact and debate, comprehensive handbooks where leading scholars explore particular genres of inquiry in detail, and introductory texts to particular educational research methods/issues of interest to novice researchers.

Mindfulness and Educating Citizens for Everyday Life

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ABOUT THE COVER

Piotr Powietrzynski is a creative photographer living in New York. His story of survival through meditation and mindfulness is featured in Chapter 12. The back cover image is a self-portrait illustrating depths of depression, loneliness, and desperation. Piotr says:

> "The essential things in life are seen not with the eyes, but with the heart," wrote Antoine de Saint Exupéry in *The Little Prince*, the most poignant story I've ever read. I like this book so much because everything I do as a photographer seems to be about emotions. The way I see it, they form a third dimension, complementing two-dimensional, flat surfaces of photographic paper or digital screens.

You may view Piotr's work @ http://www.piotr-powietrzynski.com

KENNETH TOBIN

1. MINDFULNESS AS A WAY OF LIFE

Maintaining Wellness through Healthy Living

ABSTRACT

In this chapter I describe how personal and professional conduct interpenetrate in pursuit of a fulfilling, happy, and productive lifestyle characterized by harmony and compassion. Our research interest in mindfulness, meditation, and wellness is grounded in a multilogical methodology that embraces polysemia and authentic inquiry. We insist that all participants in research benefit from a study and, as a consequence, we design interventions to afford participants being able to change conduct and benefit from what we have learned in a study.

Research in urban schools increasingly drew our attention to ways in which social interactions were mediated by a rise and fall of emotions. Furthermore, emotions are contained in and expressed by the body. Expressed emotions afforded our seeing that the rise and fall were interconnected with changes in facial expression, voice quality, gestures, eye gaze, pulse rate, oxygenation of the blood, and blood pressure. We realized that a build up of emotions could have serious implications for wellbeing.

Finally, I describe how alternative knowledge frameworks, especially Jin Shin Jyutsu, can be used in studies of emotions, meditation, mindfulness, and wellness. This is especially the case when authentic inquiry is used to frame studies in which individuals and collectives are to benefit from what we learn from research. I argue that Jin Shin Jyutsu is a fertile area for further research in the learning sciences, especially in studies involving participants across the birth through death continuum in a variety of formal and informal institutions (e.g., recreation centers, retirement villages, and nursing homes).

Keywords: meditation, mindfulness, wellness, literate citizenry, authentic, inquiry, interventions

Life is replete with contradictions. For example, from a young age, we are taught by many, "to do with purpose," to act in life to maximize the benefits of being in the world with others. To some degree this can be captured in the powerful idea of human agency (Sewell, 2005) – to act with purpose, appropriating the available resources to meet articulated goals. Within a context of science education,

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 1–24.

Wolff-Michael Roth drew attention to the limitations of a theory of agency that stands free from what Emmanuel Lévinas (1999) described as passivity (Lévinas scholars, such as Michael Juffé (2003) have pointed out that a better term might be receptivity to learn). Consistent with William Sewell (2005) and others who have studied agency, Roth proposed an agency | passivity relationship (Roth, 2007). Here the | stands for: constituents of a whole; co-occurrence with each construct presupposing the existence of the other; and codependence.

A contrast to our approach is the idea of "not trying to do too much." Many have written about mindfulness, but none more clearly than Thich Nhat Hanh (1996), who interconnects constructs such as being home, being present, being now, and being free. Mindfulness is not a journey with objects (i.e., goals) – there are no accomplishments to be pursued, no competition, no judgment – simply being in the here and now. Any activity is a context for mindfulness, including breathing, walking, and eating. Hanh (p. 3) notes that, "Walking meditation is meditation while walking. We walk slowly in a relaxed way, keeping a light smile on our lips." He then goes on to say, "When we are mindful, deeply in touch with the present moment, our understanding of what is going on deepens, and we begin to be filled with acceptance, joy, peace, and love" (p. 4).

To some degree the values about human agency have been woven into ways of thinking about mindfulness and meditation. Even though we (i.e., our research squad) embrace an agency | passivity dialectic, we are attentive to engaging mindfulness and meditation for particular purposes (Powietrzynska & Tobin, 2015). That is, be mindful because, if you are, then there are the stated and known advantages. In fact, unless we can clearly see specific advantages it is difficult to justify the inclusion of mindfulness and meditation in a curriculum.

Hanh views mindfulness and meditation as constituents of a whole; inseparable and not discrete activity. From this perspective it may be destructive to adopt a technical approach to meditation and mindfulness – the essence seems to be to do without trying to do. Even though it may be desirable to be happy and not to be angry, for example, it probably is best to attain these states by being in the moment, not setting benchmarks and striving to reach them. No judgment, no competition and compassion to self and others. Hanh's approach to both mindfulness and meditation is almost the antithesis to adopting agency while being mindful and meditating.

We adopt a stance of not choosing between what might seem to be alternative ways of thinking about mindfulness and meditation (Powietrzynska, Tobin, & Alexakos, 2015). Instead we opt not to dichotomize, but to accept both ways of thinking as valuable to a hermeneutic project in which we seek to learn from all sources, irrespective to them being different on what appear to be salient points. To us, meditation is primarily about detaching from feelings, emotions, sensory experiences, thoughts, (…), everything. To be abstract, meditation is concerned with achieving a state of nothingness. However, this is the experience of someone who has now been meditating for a number of years. When teaching others to meditate it is advisable to provide a focus (e.g., the breath), so that everything else can be

unattached. In our case the focus we used was the breath. Just as yoga teachers do in most parts of the world, we distinguished between thoracic and abdominal breathing and ensured that the belly expanded with the in-breath and contracted with the out-breath. For many of the participants in our research this became the focus for meditation – making sure they breathed most of their air out. Participants were advised to "let go" of thoughts and emotions; acknowledging their fleeting presence, but not dwelling on what they meant or why they appeared. Certainly, participants were encouraged not to beat up on themselves when they lost focus. Instead, they were to restore focus on the out-breath. When disruptions occurred, participants were advised to notice them, let them go, and refocus on the out-breath.

Figure 1. Breathing meditation at the start of a monthly seminar

My experience is that meditation concerns unattachment – getting unstuck (Chödrön, 2006). Letting go of emotions and values is critical. For example, when people meditate, they usually prefer to find a quiet, dark space where the bustle of everyday life is diminished. This is not just a case for beginners; even experienced monks are likely to seek out a remote, solitude location. However, remoteness and solitude are values that can constitute attachments. Accordingly, the practice of meditation can occur in any context, acknowledging that letting go involves all attachments, not just those that are more obvious than others.

In Figure 1 I am shown engaging in meditation prior to the start of a plenary address delivered by a colleague to more than 50 participants. As is now customary, I invited participants to relax, drop their shoulders and focus on breathing with the belly. My feet are flat on the floor and, as is shown in this case, I crossed my wrists so that my left hand was placed just above my right knee on the inner side and my right hand was similarly placed on the left leg. As well as being aware of the out

breath I am also aware of the synchronous energy pulses felt in each of my hands (read on for additional discussion on the pulses and meditation).

MINDFULNESS

When we think about a social construct, such as mindfulness, we use language to describe the construct in relevant contexts (Tobin, 2015). In so doing we face challenges of conveying fully what we understand about the construct – no matter how thorough we are in our descriptions, we underrepresent the full meaning of the construct – there always will be more (i.e., a crisis of representation). Also in our descriptions we identify characteristics of the construct and it is important to acknowledge that any list is incomplete and limited in projecting the full meaning of the characteristics. There always will be more – more characteristics and more that can be said about the meanings of each of them. There are numerous characteristics of mindfulness; some being more salient than others, as the contexts for activity vary. Being present in the moment, or being aware of the moment, is central to the construct of mindfulness. A mindful person would not be looking forward or backward in time, but would instead be focused in the moment, using all senses to be aware of what is happening, and being sure not to attach to thoughts, emotions, values, and happenings that are not salient to the activity. Avoiding attachments is part of the art of becoming mindful, as is becoming unstuck when attachments occur. Of course, awareness is important and complicated. Knowing what is happening, that is, being aware involves theoretical frameworks so that sensory data are interpreted in particular ways that have relevance to values and emotions (e.g., social justice, fairness, honesty, compassion, kindness). In our ongoing research on mindfulness we began in the field of education and then expanded our work to focus on specific aspects of social interaction – including mindfully speaking and mindfully listening. I address these specific instantiations of mindfulness in later sections of the chapter. However, before doing so I describe ways in which we developed and applied heuristics as an integral part of authentic inquiry.

Heuristics

A heuristic is grounded in Pierre Bourdieu's (1992) reflexive sociology in the sense that it is intended to heighten sensitivity of a given construct for the purpose of individuals "becoming aware of the unaware," and considering their personal conduct in terms of characteristics of the heuristic and their appropriateness for self and others (individuals and collective). Objects, including short phrases/assertions and pictures, are selected for inclusion in a heuristic. We refer to these as characteristics; some of which are chosen to heighten participants' awareness about selected characteristics affording them to connect their own conduct to what they understand about the characteristics. Essentially researchers choose from a

pool of characteristics those that seem contextually appropriate. Accordingly, the heuristics used in a study, for a given construct such as mindfully speaking, reflect the context. For this reason, heuristics are often referred to as *shape shifters* since the characteristics used in a study are contingent and emergent. Of most importance is their role in catalyzing reflexive conduct of the participants in a study. We consider there is great potential in designing heuristics to incorporate many activities such as video recorded vignettes; short stories; dramas; songs; poetry; art (e.g., murals, graffiti, and paintings); and photography.

The use of heuristics acknowledges the importance of agency. After becoming aware of some of the characteristics of a construct, we expect participants to position themselves in relation to the characteristic and associated construct in terms of their values. Making such a commitment opens up possibilities for judging whether or not personal conduct is in harmony with an individual's values. If a person becomes aware of contradictions, then agency can facilitate changes in conduct. In the specific case of mindfulness, a person's use of a heuristic might mediate the extent to which a person seeks to be more mindful during social interactions.

Over time, and in numerous contexts, such an individual can be adaptive in what it means to be mindful. The balance between agency and passivity, both of which are ever-present, can and will be emergent and contingent. Accordingly, those studying how and when a person is mindful will undoubtedly see a transformation that parallels a journey. Beginning the journey likely necessitates higher levels of conscious action with associated goals and judgments. However, as learning accrues, the enactment of mindfulness can become routine – in the sense that mindful practices may pervade the lifeworld. This is an interesting proposition that invites research.

Richard Davidson's research in social neuroscience has drawn our attention to neuroplasticity of the brain (Davidson & Begley, 2012). Over an extended period of time Davidson and his colleagues have shown how consistent meditation can and does change the structrue and functioning of the brain. With this in mind, we have been highly interested in using heuristics to allow individuals to change emotional styles – which have often been regarded as predetermined i.e., this person is the way s/he is. Davidson identified six emotional styles that seem highly salient to our experiences in social life, including schools, but not limited to them. These are resilience, outlook, social intuition, self-awareness, sensitivity to context, and attention. Importantly, we see the potential to design heuristics to allow participants to change the structure and functioning of the brain by adopting reflexive practices as they engage social life. In ongoing research, we regard it as imperative to design and utilize heuristics for each of Davidson's emotional styles. This is a work in progress and I provide two examples, of mindfully speaking and listening, as indicative of how we embed what we learn from Davidson and his group into our research on intervening to enhance mindfully learning and teaching.

Mindfully Speaking

Inevitably, values are involved in identifying characteristics of mindfully speaking. Context matters and can result in some characteristics being more salient than others. However, all speaking, whether it be self-talk or talk with others, should be synchronous with the purpose/goals of an activity and the interests of the collective. In many contexts talk should be shared in terms of the number of turns of talk and the amount of talk. As well as speaking in ways that align with a topic, talk should afford others' participation and learning. Table 1 contains a list of characteristics that we included in a heuristic designed to make individuals in education courses more aware of speaking mindfully. By heightening awareness about these characteristics we felt we were increasing the likelihood they would exhibit these and similar characteristics when appropriate.

To what extent are conversations dialogic in everyday life (Bakhtin, 1986)? To what extent do speakers in dialogue pay attention to sharing the number of utterances and time of talk? Is it important that characteristics like these are shared or is it okay for somebody to speak with an expectation that another will listen, understand, and learn?

As a form of action, speaking is a way to represent what is known about the topic of discussion. In dialogue with others, speaking aloud allows a speaker to represent what s/he knows, for others to listen and make sense of what is said, and for responses to be formulated for purposes such as to elaborate, expand, clarify, question, refute, and accept. Accordingly, when such actions occur there are benefits for the speaker in terms of speaking and hearing what is said after the initial talk. If there is no opportunity to speak then a person is twice denied. Similarly if there is no follow-up to an utterance the person misses out on learning from a response – or putting it another way learning from others' talk. In dialogue it seems as if a turn at talk is an opportunity to represent what is known and thereby to learn through action and then to receive responses to what has been said, which creates further opportunities for learning to occur. If the focus remains on what is being said originally then successive turns at talk become resources for speakers and listeners to learn from one another. The value in symmetry, when it comes to speaking, is that every speaker has a chance for the double benefit of acting through speech and acting through listening to others' responses to what was said.

In learning situations, in institutions such as schools and museums, it seems important for learners to practice dialoguing with others so that in every day life they can enact dialogue to maximize opportunities to communicate clearly with one another while learning from one another. The learning I have in mind is relatively mundane – but extremely important. When interacting with others it is important to understand their perspectives, build respect for what others believe and value highly, and regard others as resources for personal learning. Whether the dialogue involves a Shakespearean play, how to cook a kimchi pancake, or how to get from Penn Station New York to New York University using the subway, dialogue will necessarily

involve a balance that reflects turns at talk and time of talk. The distribution among participants in dialogue should be relatively equal for a given topic of conversation.

Mindfully speaking involves speakers monitoring the amount of time they have been speaking and the number of turns of talk they have had in relation to others involved in the dialogue. A mindful speaker would wind up a talking turn if and when the amount of time starts to exceed the bounds of what is reasonable. This can be accomplished by transferring the speaking turn to another speaker, preferably one who has not spoken on the topic or has not contributed equitably. Rather than speaking excessively, a speaker shows his/her awareness of the value of sharing talk by involving others and thereby maintaining balance. The emotions represented in the faces and body movements of others are an important indicator of whether the amount of talk is becoming excessive. If speakers show social intuition (Davidson & Begley, 2012), by carefully monitoring others' actions as they participate in dialogue as listeners, there can be signs that it is time to transfer opportunities to talk to others rather than continuing to speak. When the signs of others' emotions are such that their interests are waning the speaker can adopt a strategy of opening up the conversation, leaving the decision of who will speak next to the group as a whole, or s/he can redirect the turn of talk to someone else. By monitoring others' emotions information can be gleaned about their levels of comprehension, their interests in what is being said, and the synchrony of their emotional responses with the present utterance/speaker and the topic of dialogue. When asynchronies occur it is important to understand them and act appropriately.

As well as monitoring others' emotions it is important when speaking mindfully, to be self-aware (Davidson & Begley, 2012), by monitoring personal emotions as they emerge, taking care that they do not stick to ongoing conduct and build to an extent that dialogue is disrupted and/or diverted in undesirable directions. If this occurs, then strategies need to be enacted to become unstuck – that is to let the emotions go so that the focus can return to the purpose of the dialogue. In this example becoming unstuck is a repair ritual. Another example is when a speaker is interrupted by others' emotions and/or gestures, body movements, and verbal fillers such as umm, urr, ah, etc. When breaches in fluency occur it is important for the speaker to be able to repair breaches and either continue with an utterance or transfer a turn of talk to others. A condition of mindfully speaking is to be aware that a breach has occurred and assume responsibility to repair the breach.

When a participant in dialogue shows an interest in participating orally, it is important not to intentionally shut that person out. The right to speak is neither an individual nor a collective matter – instead, it is an outcome of an individual | collective dialectic. When a person signals an intention to speak, in all the ways that such signals can be transmitted, the speaker should not raise his/her voice to speak over any attempt of the other to get involved by beginning to speak. Although it might be legitimate to argue that the person seeking to speak should not speak until the speaker has finished, it is important to acknowledge the rights of a listener to contribute to dialogue when, if, and as necessary. That is, the right to speak is not

preordained as an ongoing (unconditional) right of a speaker. Rather, such a right is contingent on what is happening and there need to be ways of signaling to a speaker that another wishes to participate – to take a turn of talk. Accordingly, when another signals a desire to begin a turn of talk the speaker can pass the baton, confident that s/he can contribute further a little later in the sequence of interactions.

A mindful speaker should not assume that what s/he has to say is the most appropriate action in an interaction chain. On the contrary, if another wants to get involved, and it makes sense to do so, then a transfer in the turn of talk can and should occur expeditiously. Failure to transfer a turn of talk can create a breach in the flow because the signal of desire to talk can be interpreted as a contradiction or resistance to enacted culture. The conditions for fluency are that actions occur in a timely manner, are appropriate, and are anticipatory. In the circumstance of a person signaling a desire to assume a turn of talk, a mindful speaker could act synchronously by handing over the baton to the person who desires to speak. When a speaker hands over the baton, it is a sign of being: sensitive to context, resilient, and maintaining a positive outlook. That is, by transitioning to a listener, a speaker engages several emotional styles while maintaining attention (i.e., the focus of dialogue). This is a good example of the ways in which Davidson's work on emotional style pervades mindfully speaking and listening.

Mindfully speaking necessitates that a speaker is aware of the loudness and frequency of utterances. Both should be comfortable in the sense that participants in dialogue can hear what is said without having to strain to do so and they should not feel the discomfort of shrill utterances that can catalyze negative emotions. Instead, mindfully speaking involves delivery of talk in ways that are comfortable to listen to – not too loud and not too soft, and not containing excessive energy in the higher formants (i.e., overtones). An important aspect of mindfully speaking is that the loudness of what is being said should not disrupt others who are not part of the dialogue. Too often speakers deliver what they have to say with high-intensity that can be heard by others who may not want to be privy to what is being said. A mindful speaker will use an appropriate intensity, pitch, and pattern of intonation. Other characteristics of prosody that should be considered in dialogue are to use speech rhythms that reflect the shared mood of the group, and are consistent across successive speakers. Also, prosodic bridges are usually associated with successful transitions from one speaker to the next. A prosodic bridge entails symmetry of the intensity and pitch of the utterances of successive speakers (Roth & Tobin, 2010). That is, the intensity and pitch used by a speaker who is finishing would be similar to the intensity and pitch of the next speaker, taking into account physical characteristics of the speakers – such as gender and age.

Other characteristics of mindful speech include speaking for the other, that is, speaking with the comprehension of others as a primary goal. This is best gauged by being attentive to the emotions of others as they may be represented in their actions. It is important that speech is not used in dialogue as a weapon – a tool for social violence. Accordingly, a speaker should be aware of others' feelings and

a necessity to show respect for their identities and contributions. A heuristic for mindfully speaking is provided in Table 1.

Table 1. Mindfully speaking heuristic (co-developed with Malgorzata Powietrzynska and Konstantinos Alexakos)

When I participate in a conversation:

- I act to balance the amount of time I talk
- When I have been speaking too long I wind up my talking turn
- Before speaking I pause to make sure the previous speaker has finished
- As I speak I monitor others' emotions
- As I speak I monitor my emotions
- When asynchronies occur I try to understand them
- I try to make conversations with others successful
- When breaches in fluency occur I try to repair them
- I do not increase the loudness of my voice to continue my talking turn
- I speak with a similar rhythm to previous speakers
- I maintain the focus of previous speakers
- I look for signs that others want to speak
- I am aware of how long I speak
- I create chances for others to speak
- I act to balance my speaking turns
- The loudness of my talk is appropriate
- I do not speak to hurt others
- My talk shows respect for others' perspectives

Mindfully Listening

What seems most salient in mindfully listening is to silence modes of self-talk that would disrupt listening to others, hearing what they say, making sense of others' ideas, and exploring affordances of what others are suggesting/offering. Often it is the case that a "listener" decides early to oppose a particular speaker and then uses the time when listening might occur, to engage self talk as a rehearsal to oppose, rebut, and present alternatives. Mindfully listening focuses on making sense of what others are suggesting and actively considering the affordances of others' ideas. Table 2 contains a heuristic in which characteristics of mindfully listening are presented.

Mindfully listening is a highly interactive process in which a listener interacts with others in a community, including one or more speakers. It is important that a listener's actions do not disrupt the fluency of others' cultural enactments. To be

mindful while listening is to ensure that emotions do not affect ongoing conduct in a deleterious way, but the listener maintains focus on a stream of spoken words, while utilizing all senses to monitor what is happening throughout the field.

While listening to the spoken words a mindful listener makes eye contact with the speaker occasionally and monitors eye gaze. Paying attention to the speaker's eyes provides a listener with information about the speaker's convictions and his/her emotional state.

Looking at the speaker and participating synchronously in a non-obtrusive, nonverbal manner is a means by which listeners can show their respect of a speaker. For example, when a listener nods his/her head as a sign of attentiveness, the head nod is a sign to the speaker that the listener is making sense and encouraging further input from the speaker. Tacitly, a nod of the head is a sign that what is being said is being followed with understanding. Synchronous actions are likely to be interpreted by others as respectful whereas asynchrony may disrupt flow and be viewed as disrespectful. Examples of disrespectful actions include efforts to intervene, speak over, or interrupt a speaker.

When a speaker is violent to others, interventions to disrupt the flow of enactment, that is continued speech, are warranted. Initially this might simply involve shaking the head, frowning at the speaker, moving the hand to signal that cessation of speaking is suggested, etc. If the speaker continues to inflict violence by speaking inappropriately then an intervention that involves interrupting the speaker through verbal actions might be considered "right conduct." The important point to stress is that mindful listening involves active monitoring of what is being said in a context of all that is happening. If individuals in the community of participants were distressed by what is being said, then a compassionate and empathetic stance would likely involve an intervention to cease the social violence. There is not a formula to apply to decide whether disruption through verbal actions is warranted – it is a judgment call.

Compassion and empathy are constituents of mindful practice (Noble this volume). As an active process, listening should embrace compassion to all participants, including self. What this entails is to provide courtesy to a speaker and encouragement to communicate fluently and effectively. A mindful listener who shows compassion would feel a speaker's suffering, evident in a shared mood, that is, synchronous expression of emotions – especially empathy for others. The expression to walk in another's shoes springs to mind in thinking about listening to show compassion for a speaker. The actions of a listener would involve inner speech and nonverbal expression of emotion, the latter being visible to all participants in the dialogue, but especially focused on the speaker. In terms of expressing compassion for oneself it is almost as if the "first person I" expresses empathy for the suffering of the "third person me."

Consistent with the ideas that listening should be respectful and compassionate is the condition that listeners can orientate themselves to notice differences and regard them as resources for personal learning and accomplishing collective

goals. This standpoint provides a stark contrast to one in which a listener's ideas are privileged over others' ideas. That is, instead of difference being regarded as deficit, difference is viewed as expansive – an affordance for producing successful outcomes.

If a listener looks at the speaker it is possible to monitor facial expression of emotions continuously. Since humans frequently express a range of emotions facially, taking account of emotions associated with verbal utterances can expand the interpretation of oral texts. Consistent with the idea that a mindful listener would focus on spoken words is an added condition that all senses are used to capture what is happening in the moment. A key to mindful listening is staying in the moment and being aware of all that is happening. In this case resources available for constructing meaning about verbal texts are greatly expanded by a listener's attention to facial expression of emotion, gestures, head movements, and body movements and orientations. Importantly, expanded awareness opens up possibilities for acting synchronously and fostering entrainment and solidarity through dialogue.

Table 2. Mindfully listening heuristic (co-developed with Malgorzata Powietrzynska and Konstantinos Alexakos)

When others are speaking in a dialogic conversation:

- I monitor the eyes of the speaker
- I show my respect for the speaker
- I express my opposition verbally and nonverbally to unethical speech
- While listening to others my nonverbal actions project compassion and empathy to the speaker
- When a speaker says something with which I disagree I try to learn from the difference
- I make sense of the speaker's facial expressions of emotion
- I make sense of the speaker's gestures
- I nod my head as a sign of attentiveness
- Following each utterance I provide an appropriate pause to ensure that the speaking turn is finished
- When necessary I seek clarification of the meaning of an utterance
- When necessary I request elaboration so as to expand the meaning of an utterance
- When necessary I check my understanding of what has been said
- I ensure that my nonverbal actions do not breach the fluency of what is being said
- I use nonverbal actions to create emotional synchrony with spoken text
- I ensure that my emotional response to spoken text does not stick and create difficulties in understanding subsequent utterances
- I listen for similarities and differences to what has been said previously
- I look for similarities and differences in the meanings represented verbally and nonverbally

MEDITATION, MINDFULNESS, AND WELLNESS

Our research on emotional expression and the teaching and learning of science in urban high schools was planned to be authentic (Tobin, 2015). That is, the participants involved in the research should learn from their participation, seeing their social lifeworlds in different ways, thereby changing their ontologies. In the process, the research would be educative in that all teachers, students, and school administrators, for example, would be aware of differences between and within stakeholder groups and would understand the rationale and affordances of those perspectives. As a result of being involved in research, the institution and all individuals would benefit from being involved.

This is no easy task. It was clear to researchers, including teacher and student researchers, that excesses of emotion characterized almost every instant/instance of the curriculum being enacted. Anger, fear, sorrow, and raucous happiness were seemingly ever-present in a dynamic flux of emotions that seemed to initiate and sustain dysfunction (Tobin & Llena, 2012). More was needed than heightening awareness. There were high levels of denial among participants, who often argued that they had more control than they appeared to have over what was happening. Very little science appeared to be taught and learned and students and teachers were frequently absent due to illness. We searched for solutions, designing activities to afford teachers and students collaborating to produce cultural harmony and collaborative learning. Notably, we designed and researched coteaching and cogenerative dialogue as activities to foster productive learning environments. However, despite documented successes there was evidence of the dangers of excess anger and ever-present stress. When one of our teacher-researchers had to retire from teaching because of heart problems, we were determined to identify interventions to ameliorate excess emotions if and when participants in teaching and learning contexts deemed it necessary/desirable.

Breathing Meditation

Based on what I have learned from our research I use an intervention at the beginning of class so that all participants can quiet their minds. Essentially, the intervention is to use abdominal breathing with a focus on the out-breath. Initially we used 3-minutes at the beginning of class to meditate. As we became more experienced and had answers to what is happening before, after, and during; we were able to adapt the intervention in several interesting ways. In the last course I taught in fall 2015, I commenced each class with 5 minutes of breathing meditation followed by 10 minutes of free writing. In this specific class the intervention prepared doctoral students to participate in a class on multilogical approaches to research (Kincheloe, 2008; Tobin, 2015).

Because we undertake research as part of the ongoing teaching and learning, what we do is consistent with research methodology that embraces authentic

inquiry. In particular, we use what we learn from research to educate other participants in courses like the ones we are teaching, and we change practices to enhance what is accomplished collectively and ensure that all participants benefit from what we have learned – not just those who are best positioned to benefit. Specifically, we acknowledge 5 minutes of breathing meditation to be optimal for a 2-hour class and ensure that directly after breathing meditation we do not have an activity that subverts what has been accomplished through meditation. Accordingly, we do a free writing activity to afford mindfulness while writing about something that is salient to the writer. We avoid activities that will produce excesses of emotion that might be difficult to ameliorate.

The appeal of breathing meditation as a way to still the mind was the association of the nature of breathing to produced/enacted emotions. Pierre Philippot, Gaëtane Chapelle, and Sylvie Blairy (2002) reported that a person's use of deep, slow, abdominal breathing was associated with happiness. Because of the relationships of expressed emotions with mindfulness and wellness we anticipated numerous benefits from breathing meditation. The nature of our ongoing research led us to closely monitor pulse rate and oxygenation of the blood during teaching and learning activities. Specifically, when peers cotaught lessons in a science teacher education course, they wore finger pulse oximeters that had a display that was visible to them as they taught. Accordingly, as they taught they had in-the-moment readings available for pulse rate, oxygenation, and strength of the heartbeat. That is, the coteachers became aware of their pulse and blood oxygenation, opening the possibility of these variables being foci for meditation. Because of the implications for health of high pulse rate and low oxygenation, several students and faculty obtained oximeters so that they could closely monitor changes in these variables and understand their bodies in terms of changes in these and other physiological conditions as they participated in a variety of professional and private activities. Of course, arterial pulses also could be read by placing the fingers in appropriate locations on the body – such as the inside of the wrists.

Meditation is an activity that can afford a state of mindfulness in which the mind lets go of thoughts by focusing on some phenomenon. In this chapter I have provided examples from our research that have been associated directly with wellness and awareness about some aspect of the body. Heightening awareness is central. For example, introducing abdominal breathing and distinguishing it from thoracic breathing is a forerunner to breathing meditation. Wearing an oximeter is another way of becoming aware of physical characteristics that otherwise might not be salient. Being aware of oxygenation of the blood can heighten attention to symptoms of low oxygen, such as lightheadedness, giddiness, etc. If the register on an oximeter or a change in physiology points to low oxygen, a person can seek to increase oxygenation through abdominal breathing or, if s/he is aware of Jin Shin Jyutsu (see later in this chapter), holding the ring finger. Additionally, depending on the circumstances, a person might identify low oxygen with stress buildup. In such

circumstances the person might step back to relax for a while so that the body can re-harmonize.

The research that connects breathing patterns to emotion points to an important reason for practicing breathing meditation. The expression of negatively valenced emotions, such as sadness, anger, and fear were connected to rapid, shallow, thoracic breathing, whereas positively balanced emotions, such as happiness, were related to deep, abdominal breathing. Since emotions are thought to be associated with the harmony of the body, there is an argument that research on meditation and associated practices might be undertaken with the citizenry at large, birth through death, not just those involved in teaching and learning in schools, universities, and informal settings such as museums, zoos, and science centers.

A Multilogcal View of Wellness

My searches for ways to ameliorate excess emotions and improve wellbeing involved self-help interventions. I was skeptical about what seemed to be a monopoly grounded in Western medicine that emphasized an approach based on diagnose – prescribe medication. Based on my personal experiences with Asian medical knowledge systems (Kaptchuk, 2000), I focused on acupressure and reflexology as potential solutions to addressing excess emotions and health projects like those that kept teachers and students away from school.

At a personal level, my acupuncturist (Jenny) was successfully treating my chronic health problems that had persisted for more than three decades. These problems defied numerous Western medical efforts to resolve numerous problems. Jenny's approach was astonishing to me and vastly different than the mostly hands-off approach I had experienced with Western practitioners. Achilles tendons, calf muscles, lower back pain, shoulder, tennis elbow, seasonal allergies, food allergies – these labels were among a lengthy list of projects that Jenny addressed with confidence and success. Jenny's hands-on approach involved listening to my description of symptoms and then feeling with her fingers for blockages in the flow of Chi. She was an expert and knew which flows to use to treat particular labels (e.g., seasonal allergies) and symptoms (e.g., pain in coccyx). For example, my coccyx was so swollen and sore after international air travel; I could rarely sit without pain. After several acupuncture treatments the coccyx was no longer swollen and I was pain-free in that area.

I began to learn acupressure and was impressed with the potential of reflexology. Even though reflexology was relatively painful, the detailed map of the feet and toes seemed promising for the design of self-help interventions that we might try out in our research. On a visit to Singapore a colleague arranged for me to meet an expert reflexologist for treatment and associated conversations. Although I felt the benefits, I was not so confident that reflexology would provide me with the wellness toolkits I envisioned designing and using. Fortunately, my colleague had learned some of the basic tenets of Jin Shin Jyutsu (JSJ) and recommended I consider the

possibilities of JSJ. She gave me a book (Burmeister & Monte, 1997) and some photocopied pages – enough for me to get started.

Jin Shin Jyutsu and Wellness

JSJ is a complex knowledge system related to the flow of universal energy, or a life force, through the body. According to JSJ, when blockages occur in the flow of universal energy, health projects arise and can be exacerbated if energy accumulates or begins to flow along an incorrect pathway (Burmeister, 1997a,b). JSJ faculty and practitioners throughout the world have painstakingly documented the sites for energy blockages, ways in which blockages can be identified, and methods of harmonizing flows of universal energy in the body. Chi (i.e., life essence) enters the body with the breath and is produced from the digestion of food. It flows in vertical and diagonal streams and in 12 organ flows (e.g., liver, spleen). The processes of maintenance and repair are accomplished through these flows, and it is important for the health of the body to sustain them so that health projects resulting from blockages and faulty flows do not produce pain, illness, and in some circumstances death (Higgins, 1988).

The JSJ knowledge base identifies 26 pairs of safety energy locks (SELs) that are situated symmetrically on the body to the left and right of the spine (Figure 2). The flow of Chi can be halted and/or diverted at any of these SELs, which lock when there is an excess of emotion, when the body is physically damaged, and when toxins enter the body with solid food, liquids, and gases. Changes to any of the normal flows produce disharmony in the distribution of Chi, depriving cells and organs of the life source that repairs, sustains, and grows. Harmony can be restored by holding/touching a pair of SELs at which Chi is blocked.

When the hands are placed and moved systematically on the body, the sequence of touches and holds is called a flow. There are many flows that occur naturally in the body, following a 24-hour cycle as Chi is distributed harmoniously to all parts of the body, to support life. For example, there are 12 organ energy flows (e.g., lung, large intestine, stomach, spleen) and other very important vertical and diagonal flows are associated with distributing Chi to the cells. These flows are used in everyday practice by many of those who have been and are involved in our research projects. Also, the flows are foci for ongoing research on mindfulness and wellness (Tobin, Powietrzynska, & Alexakos, 2015).

Some of the approaches are extremely simple in the sense that they are not difficult or sophisticated to do. An example is to separately hold each of the fingers, one at a time, on both hands. You might begin by wrapping the fingers of the left hand around the right thumb. The hold grasps the palm side of the right thumb with the fingers of the left hand. There is no need to squeeze hard. According to JSJ theory the thumb is associated with the emotion of worry. If a person's lifestyle produces worry, universal energy can be blocked in certain locations of the body. Holding the thumb can reduce the intensity of worry by removing blockages in

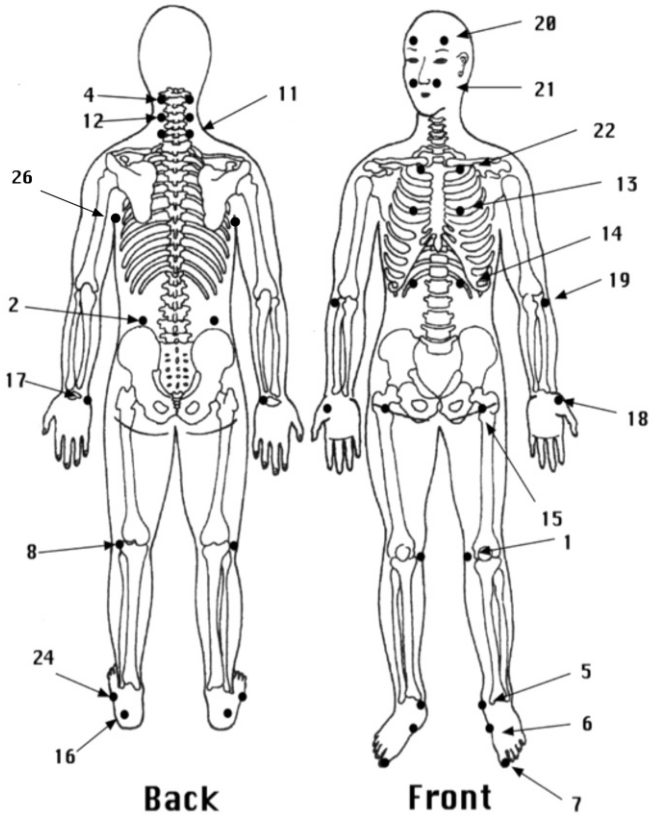

Figure 2. Selected SELs that have salience to this research

those locations. There are other good wellness-related reasons to hold the thumb. JSJ theory indicates that the thumb can be held to harmonize four safety energy locks and two organ flows (stomach and spleen). Similar benefits are possible by holding each of the other fingers on a regular basis. As a caution I point out that JSJ is not a "quick fix" for health projects that have been ongoing for years – whereas some projects, such as headaches and back pain may be relieved relatively quickly, others can take weeks and indeed years of treatment.

When fingers on one hand hold a finger on the other hand, pulses can be felt in the touch/hold. These pulses can be foci for meditation (Burmeister, 1997a,b). For example, as part of a personal wellness project I hold each finger and each toe for 3 to 5 minutes in a meditation that serves to still my mind and harmonize all Chi flows in my body. Furthermore, by reducing the magnitude of emotions, holding fingers and the toes, promotes mindfulness and contributes to good health.

According to JSJ theory, blocks and diversions in the flow of Chi through the body can initiate and sustain wellness projects. The body harmonizes its flows routinely, but projects can arise when the body is unable to restore harmony without some form of intervention to remove a blockage or restore a flow to its appropriate pathways. Mary Burmeister (1997a,b) has documented the seminal work on Jiro Murai and her subsequent clinical studies to show the location of safety energy locks on the body and the different pathways used to distribute Chi to cells and organs throughout the body. Burmeister has laid out how to "jumper cable" the energy flows by using the hands to hold the body in different locations. An extensive corpus of research documents symptoms that can occur when blockages and diversions arise in organ energy flows, and safety energy locks, and in a variety of special flows (e.g., back pain; eyesight; diabetes).

To use JSJ to address health projects for self and others requires ongoing training, although there are relatively simple practices that can be done by anyone following someone's instructions of what to do. For example, holding fingers and toes is a simple thing to do and it makes a significant difference almost immediately. Once a person knows how to locate safety energy locks on the body, it is relatively straightforward to learn all of the basics and apply what is being learned to address wellness projects of self and others.

Safety Energy Locks

Most people can touch most safety energy locks (SELs) on their own bodies. This is especially the case for the SELs on the front of the body. To get started, place the left hand on the left SEL 20 (see Figure 2). That is, place the left hand on the forehead above the left eye with fingers pointing toward the centerline of the forehead. This can be abbreviated as left on L 20. Similarly, place right on R 20.

If the hands are placed lightly on L 20 and R 20 for about 3 minutes, it is likely that energetic pulses will be felt in both hold/touch locations. When these pulses beat in synchrony, it is evidence of harmony occurring at SEL 20. There are several points of emphasis. First, it takes practice to feel pulses. Second, harmonizing can occur whether or not you feel pulses. Third, the precise location of an SEL can vary – however, the diameter of an SEL, on each side of the body, is about the same as the width of a person's palm (approximately 3 inches). Accordingly, you can vary the location of your hands within a 3-inch diameter, and you can vary pressure. I find it helpful to press moderately and then release the pressure so that the touch is very light. Usually, the pulses emerge/build up and I can "listen" to them until harmony occurs. I typically continue to hold for at least 30 seconds after the pulses are synchronized. Finally, the SELs are three-dimensional and can be "felt" anywhere within the volume they occupy in space. The energy field does not stop at the skin surface. Thus, if an injury is too painful to touch, the harmonizing process can occur without the need to touch the physical body.

Having located and harmonized SEL 20, do the same for SEL 21 on the front of the head and SEL 4 and SEL 12 on the back of the head. Once these SELs have been located and you have practiced holding each pair for 3–5 minutes, there are many possibilities to create meditation routines involving these four safety energy locks. In each of these SELs, the focus for meditation would be on harmonizing the pulses. For example, a 20-minute meditation could involve holding SEL 4s, SEL 12s, SEL 20s and SEL 21s. Other possibilities are to harmonize the following vertical pairs: SEL 4 and SEL 12 (left then right); SEL 20 and SEL 21; SEL 4 and SEL 21; and SEL 12 and SEL 21. Obviously I'm not including all possibilities for harmonizing the SELs on the head (vertical pairs). All have salience to wellness and can be included in meditation or in a systematic self-study of knowing your body. However, there is more. Now try harmonizing R SEL 4 with L SEL 12 (and vice versa). Try each of the diagonal pairs and begin to document "what happens." Suffice for me to note that regularly harmonizing these SELs in meditation and/or self-help can have important implications for wellness.

As It Is Above – So It Is Below

JSJ is a sophisticated knowledge system. It is an art that builds on extensive study of the knowledge system and practice in self-help and assisting others to overcome wellness projects. It clearly becomes evident to practitioners that causal relationships between blockages and symptoms expressed in the body are not simple. For example, nasal allergies expressed as sneezing might be addressed effectively by harmonizing left and right SEL 21 one day, and the very next day L 4 and R 22 and R 4 and L 22 may provide relief. Getting to know the body and building on experience of when, how, and what works gradually moves the practitioner from technician to artist. The technician applies procedures and rules and the artist moves intuitively and harmonizes flows through creative application of what is known. Study and practice are needed to use JSJ as an art form.

One of the guiding principles I have found useful is the mantra: as above – so below. This might apply to a sore lower back on the left side. I could start by placing my left hand on the sore spot, and then I would place my right hand on an SEL that is above the sore spot. The immediate candidate is SEL 23, but that might be hard to reach. Accordingly, I would place my right-hand on SELs 11, 3, and 26 (one at a time) since they are on the torso and above the sore spot. Alternatively, you could start at SEL 4 with the right hand, and while the left hand lightly holds the sore spot, move the right hand systematically down the vertical line of the SELs on the left side. Just skip over the SELs that are hard to reach. The purpose of harmonizing the SELs above the sore spot is to allow the energy to flow vertically from the sore spot. Next, move the right hand below the sore spot. You could start close by at SEL 2, or far away at SEL 16 and then work up to the sore spot (i.e., holding SELs 8, 25 one at a time). In this instance of a sore spot on the left lower back, it makes sense

to think about energy being accumulated above the waist on the left side needing to move somewhere. So far we have not considered moving the energy to the right-hand side. Diagonal flows should always be considered. Accordingly, I could hold SELs 11 and 3 with my left hand (simultaneously) while moving my right-hand from SELs R 25, R 8, and R 16. Since a diagonal flow is involved on the back, I would conclude by holding the coccyx with my right hand and move my left hand from SEL L 11, 3 to R 11, 3. This final suggestion is part of the art when diagonal flows on the back are noticed. I like to harmonize above and below in ways that include the coccyx.

Of course my assumption that the energy is accumulating above the sore spot may be incorrect – it may be accumulating below the sore spot. In this case the dialgonal flow would be from the lower left to the upper right.

In Figure 1 I am shown meditating while focusing on the breath and holding the pair of SEL 1s with crossed hands. Holding the 1s with crossed hands helps to move the energy down both sides of the body. Harmonizing the 1s can mobilize energy flow when it is stuck. Feeling the synchronized pulses and ensuring that I breathe out is accomplished with a low level of awareness since there is nothing for me to do but relax, drop my shoulders, and feel happy.

After reading this chapter, a logical question to ask is: what next? My suggestion is to learn where the safety energy locks are located on your body and how to harmonize them, along the lines of my suggestions in this chapter. You could also work with others to learn more about the SELs as you teach them how the SELs can be part of meditation, knowing your body, and addressing wellness projects. Once I had learned the locations of the SELs, I would turn my attention to learning the Trinity flows (main central vertical flow, left and right supervisor flows, and diagonal mediator flows). Waltraud Riegger-Krause (2014) wrote a useful book and associated card set to introduce the principles of JSJ to those seeking to learn the basics. The materials are available in German and English and are highly recommended. In the case of the Trinity flows, there is a description of each flow, a diagram, and instructions on how to harmonize the three flows. There are also descriptions of the health projects that can arise when blockages disrupt any of these flows.

Riegger-Krause provides descriptions of each of the organ function energy flows with self-help suggestions on how to harmonize them. I recommend that you trace your finger on your body for the left and right hand flows for each of the 12 organ function energy flows (e.g., stomach, spleen). You can also try Riegger-Krause's suggestions on how to harmonize these flows and become familiar with wellness issues associated with disharmonies in each. If you can do this and practice on your self and others, you know a lot about JSJ and may be ready to enroll for one or more of the courses offered by the Jin Shin Jyutsu headquarters in Scottsdale, Arizona (https://www.jsjinc.net/). These courses are offered in cities around the world in many different languages.

A Personal Wellness Project

As I completed the purchase of an item online at the Amazon.com website, I noticed that the glare on the computer screen was so bright I could not clearly read the text. After changing the tilt and orientation of the screen I reasoned that my glasses needed cleaning. Slowly I walked to a nearby hot water basin and rinsed my eyeglasses, drying them carefully with a cleaning cloth. I felt a little dizzy as I returned to the computer and, as I resumed my position in front of the chair, I felt ill at ease, perhaps anticipating what was about to happen. As I looked at the screen I could not focus on the text, which was a blur, except at the periphery. My thoughts immediately embraced a worst-case scenario. My one-year sabbatical leave had commenced yesterday. Could I undertake my research and travel if I were to lose my eyesight?

My ophthalmologist/optometrist is my next-door neighbor, I dismissed knocking on his door since it was January 2, and I felt certain he was traveling abroad. Instead, I began to consider treating myself using JSJ, a healing art in which I am a qualified practitioner. My mind began to focus on the specific ways in which eyesight can be impacted by disharmony in universal energy flow – probably due to blockages in one of the main flows. I felt a sense of urgency to act and I wanted to quickly address the symptoms. As I walked to the part of my library in which JSJ references are stored, I recalled that eye projects and dizziness are associated with flows through the middle of each shoulder blade.

The book I wanted was easy to locate since I access it almost every day. Authored by Billie Watkins (2014), it is an alphabetically arranged set of descriptions for wellness projects ranging from abortion to maintaining youthful appearance. For each health project, there is a summary of which JSJ touches, holds, and flows can be used in a treatment. I looked for eye and felt annoyed when nothing was listed. I knew that! Where is it situated? I flipped through the pages to sight and then glanced down the lengthy list of suggestions for different sight projects. I was looking for a "quickie," a straightforward self-help technique that would quickly restore my vision to normal.

I was relieved when I saw a hold that recommended I place my right-hand at the base of my skull on the right-hand side (R 4) and the left hand/fingers along the line from about a half an inch below my left nostril (L 21), along the left cheekbone (angling back to my left ear). I lay on the massage table and placed my hands in the appropriate places. I knew to touch with "gentle hands" and concentrate on my breathing. As is always the case when I practice self-help, using JSJ the universal energy pulses emerged from where I had placed my fingers, into the fingertips. Within about 15 seconds I felt strong pulses in both locations. My fingertips felt the harmony in the two pulses. The energy was flowing from the base of the skull diagonally across my head to the left cheek.

My eyes were looking upward from the massage table to the ceiling where a pair of LED ceiling lights was in my blurred vision. Within five minutes of

beginning the hold the lights no longer appeared blurred. I decided to continue to hold for about five minutes more and then to reverse the hold, using the left hand on the lower left skull (L 4) and the right hand on the right cheekbone (R 21).

As soon as my blurred vision was restored to normal I administered a liver flow, because the liver energy flow goes through the back of the eye. Based on the JSJ canon, the liver flow is often effective in treating eye projects. Since both of my eyes were blurry, it made sense on this occasion to administer the left and right flows. Although I reached this decision based on my body reading, I also read the pulses and confirmed that there was disharmony in the liver flow.

As my self-help routine continued, I focused intently on the harmony of the pulses and the slow, deep, abdominal breathing that I was employing. While these foci were paramount, I began to sift through my recent history concerning sight problems. Two very prominent events stood out, both involving tennis. One of these occurred earlier in the week. I have been a competitive tennis player for most of my life and on this occasion I positioned myself to put away an easy forehand and completely missed the ball. At the time I joked about it and put it down to "not watching the ball." Several months prior to that, while I was playing with a tennis professional, I went to volley a winner and completely missed the ball. These two events were most unusual for me and I attributed them to age, not watching the ball, and in the first instance, commencing a regimen of dietary supplements prescribed by my JSJ mentor (Jed), who also practiced naturothapy and iridology (Jensen, 1980). On April 14, 2015 I began to receive treatments from Jed, and through a combination of alternative/complementary practices numerous "big label" wellness projects commenced. These concerned the lymph system, digestive system, inflammation, and calcification.

Since I am almost 9 months into the project I know that physical and physiological changes are expected. Based on Jed's body scans, reading of the pulses, and experience, he makes me aware of what is likely to happen in the weeks before our next meeting and prescribes JSJ homework – self-help flows I should practice daily. Major changes in my wellness include decreasing inflammation and calcification throughout the body. Accordingly, the body is continually eliminating accumulations and toxins, in many ways – as gases, liquids, and solids. One tangible and enduring outcome has been a buildup of phlegm in my throat – especially overnight. Since I am taking regular, large doses of herbs and supplements I regard changes as a welcome sign of improving health – I look closely for changes and welcome what I discern. Importantly, by being aware of my body, I relate symptoms to the flows I need to administer as self-help. My standpoint is that the sooner I can administer these flows the better my body can produce the good health I am seeking.

NAVIGATING COMPLICATED LIFEWORDS

For decades my research has been grounded in classroom-based contexts. The concern has been teaching and learning in ways that produced and sustained

productive learning environments. Much of what we learned seemed applicable to a broader range of contexts – that is, the research could be adapted to subject areas other than science, schools outside of the United States, and institutions other than schools. This is especially the case with our research on emotions. The news media is replete with examples of the citizenry, or parts of it, struggling to ameliorate excesses of emotion, leading to violence, wellness projects, and widespread disharmonies in civil society. The case for educating the citizenry to ameliorate emotions seems to have never been stronger. Just as my graduate classes start with five-minutes of breathing meditation, it is easy to see how lives could be radically transformed if everybody commenced the day with breathing meditation and then used meditation as an intervention when and if necessary when emotional intensity threatened to get out of control.

Mindfulness, being in the moment, can obviously be applied in all fields of social life – e.g., work, play, hospital, and in the streets. Being mindful of self and others involves being aware of what is happening – a radically theoretical activity. It seems to be an imperative to educate citizens to identify and change their own frameworks while seeking to understand others' standpoints. Living harmoniously with others necessitates learning about different ways of being in the world and that necessitates new theoretical frameworks. For example, until you know about JSJ it is improbable that you would become aware of your almost continuous use of touches and holds to address disharmonies in the flow of Chi. It is even less likely that you would notice similar touches and holds being used by other humans, family pets, and all living things. Similarly, knowledge of mindfully speaking, for example, can make you aware of different aspects of being in the world. Educating citizens to be mindful – all citizens throughout the world – is a bold venture that should not be delayed.

Wellness also needs to be thought of beyond buying and consuming pharmaceuticals, going to the doctor or emergency room, staying in/away from school and work, being bedridden, and having surgery. Multilogical ways of looking at wellness could expand human agency by: increasing what individuals know about different approaches to wellness; and providing them with self-help toolkits to address/resolve everyday wellness projects.

I doubt there is ever a week when there are no staggering announcements about advances of medical sciences. This week's news splash, published in *Science* on March 03, 2016 (doi:10.1126/science.aaf1490), addressed a breakthrough in the treatment of cancer. Although there have not yet been human trials, the research affords personalized approaches with the potential to eliminate cancer from the body (http://science.sciencemag.org/content/early/2016/03/02/science.aaf1490). I make this point to emphasize that medical science is advancing and will continue to offer new approaches. In the meantime, there are other modalities that address human wellness that also can address big label projects like cancer. My standpoint is to adopt a multilogical perspective on wellness that employs all salient knowledge systems to benefit humankind. Just as it is folly to ignore what Western medical

advances can offer, so too is it disadvantageous to caste aside knowledge systems like JSJ. I regard it as a high priority to document ways in which JSJ can address big label projects so that the literature that presently is grounded very much in the work of Murai, Burmeister, and Haruki Kato can be expanded to include a well-documented case history that is supported by appropriate methodologies and peer review.

It is already too late to ask where to begin. All journies have already begun. Just be in the moment. Be that as it may. A question for each of us to ponder is – be for what purpose? Historically, this may have been a question for philosophers. And yet, as the Earth and its inhabitants face unprecedented challenges, it is clearly a question for each of us to answer. Be for what purpose? Mantras like the following emerge in my mind: compassion for self and others; responsive to suffering of self and others; sustaining all; and maintaining harmony. What are your thoughts?

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Kenneth Tobin came to the Urban Education doctoral program at the Graduate Center of CUNY in the fall semester of 2003. Presently he is coordinator of the Learning Sciences strand. Prior to his position at the Graduate Center Tobin had positions as tenured full professor at Florida State University (1987 to 1997) and the University of Pennsylvania (1997 to 2003). Also, he held university appointments at the Western Australian Institute of Technology (now Curtin University), Mount Lawley College and Graylands College (now Edith Cowan University).

Before Tobin became a university science educator in Australia in 1974, he taught high school physics, chemistry, biology general science, and mathematics for 10 years. He began a program of research in 1973 that continues to the present day – teaching and learning of science and learning to teach science.

PART I

MINDFULNESS IN EDUCATION

ELISABETH TAYLOR

2. MINDFULNESS AND FLOW IN TRANSPERSONAL ART THERAPY

An Excavation of Creativity

ABSTRACT

Writing this chapter has given me the opportunity to explore in-depth the meaning of mindfulness for me at a personal and professional level. As a teacher, teacher educator, transformative education researcher and recently also counselor and art therapist, the necessity of being mindful has arisen in a variety of contexts and for different reasons. Consequently, in the first half of the chapter I inquire into my understanding of mindfulness and its applications to self-care, self-development and creativity. In the second half of the chapter, I illustrate how mindfulness, flow and creativity are intricately linked, and for this purpose I engage the reader in a transpersonal art-therapy experience in which I am my own client. By drawing on transpersonal concepts such as archetypes, privileging the subconscious, and engaging in the art therapy process, I excavate issues in my life that have supported or hampered the development of my creative self. Mindfulness has played an essential part in the art-therapy process where it was employed at different stages during the experience.

Keywords: mindfulness, flow, creativity, transpersonal art-therapy, self-development

Mindfulness practice has formed an integral part of my life for a long time: as an academic and educator, counselor and transpersonal art therapist I have encountered mindfulness as both life-changing and life-saving in my professional and private life. I therefore dedicate this chapter to a personal exploration of mindfulness. I begin this journey by mapping my understanding of mindfulness from a spiritual and a 'scientific' perspective. After raising concerns about some recent developments in the mindfulness field in light of the New Age era, I discuss its vital role in self-care and professionalism for counselors/art therapists and educators/researchers/supervisors. Subsequently, I explore how creativity sits at the core of arts-based research and art-therapy and how it arises from the nexus of mindfulness and flow.

In the second half of the journey, I present an example of how I have used mindfulness in transpersonal art-therapy practice. In this case, I am my own client. I have always been intrigued as to how and why I, as somebody who has always

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 27–46.

been strongly inclined towards the arts, especially in my youth, ended up in a science education career for most of my adult years. I explore this theme through a transpersonal art therapy process during which I draw on Greek mythology – specifically, the myths of Dionysius and Apollo – in order to excavate the story of creativity in my life. I present an overview of the process of creating a collage through which I identify favorable and not so favorable circumstances in my life for creative expression and pushing boundaries, on the one hand (the Dionysian principle), and structured, orderly thinking, following rules and procedures, on the other (the Apollonian principle).

I conclude the chapter by eliciting how mindfulness helped me to establish flow, which encouraged my creative expression and deep, critical self-reflection – which are essential ingredients of the archaeological excavation into my creative past. Given the focus on creativity and the arts, I shall set out on this journey with a poem that epitomizes mindfulness and its uses in arts-based endeavors.

MAPPING MINDFULNESS – WHAT IT IS

…this pause
between present and future
is the alchemy
that will wake us
unlock us
transform us…

(from the poem "Harbor" by Nancy Levin, cited in Baron-Reid 2011)

Authors, spiritual masters, poets and artists of ancient and modern times alike remind us of the power of the present moment, which some explain is the only moment that ever exists – the only moment we ever have to make changes, to improve ourselves, to transform ourselves towards our highest potential; in other words, to self-actualize (Maslow, 1943). Paying attention to the present moment affords us the possibility of raising our awareness to aspects of ourselves that we rarely acknowledge, let alone accept. Highly focused awareness of the present moment allows us to notice the tiny cracks in the masks we wear so bravely every day, without immediately acting on the need to cover-up or fix what we do not like. This non-judging awareness encourages us to use our 'observing self' (Harris, 2008) to 'just notice' and "to wake up to what the present moment offers" (Siegel, 2010, p. 27). This awareness has been referred to as 'mindfulness'. Ancient scriptures and modern writers alike agree that the potential for mindfulness is already present in everybody and can be 'learned' by developing appropriate intention, attention and attitude (Shapiro & Carlson, 2009).

Like many others who have published before on this topic, I choose to start this chapter with a definition of mindfulness offered by John Kabat-Zinn. As a pioneer who introduced mindfulness-based stress reduction programs to

Western therapists, psychologists and medical professionals, Kabat-Zinn defined mindfulness as the "awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment" (2003, p. 145). However, contrary to many authors who only briefly mention (if at all) the roots of mindfulness in Buddhist traditions, Kabat-Zinn, to his credit, elaborates on the contributions of Buddhist scholars and practitioners who developed simple and effective ways for cultivating the basic human capacity of mindful attention. Kabat-Zinn is adamant that to 'learn' mindfulness during a short course is, by itself, insufficient – there needs to be ongoing practice if it is to inform one's life and actions. Furthermore, he argues that mindfulness ought to be regarded as a 'consciousness discipline'. However he cautions that "in encountering the consciousness disciplines and the question of their possible adaptation […], it is critically important to treat mindfulness and the traditions that have articulated it much as a respectful anthropologist would treat an encounter with an indigenous culture or a different epistemology" (Kabat-Zinn, 2003, p. 146). In other words – avoid treating mindfulness as yet another New Age technique.

Since its introduction into psychology and medicine, mindfulness has been drawn upon in many different guises, particularly in counseling, psychology and medicine where we find: Mindfulness-Based Stress Reduction (MBSR) (Kabat-Zinn, 2003); Mindfulness-Based Cognitive Therapy (MBCT) which focuses on people suffering from depression (Segal, Williams, & Teasdale, 2002); Dialectical Behavior Therapy (DBT) aimed at treating people with Borderline Personality Disorders (Linehan, 1993); Mindfulness-based art therapy (MBAT) (Monti & Peterson, 2003), and Acceptance and Commitment Therapy (ACT) which trains the mind to abandon attempts to control thoughts and feelings, and to merely observe, and accept thoughts as they arise (Harris, 2008). Given the rapidly growing commercial interest in mindfulness as a new panacea for the deep-seated disquiet of (post)modern life, Kabat-Zinn warns that "mindfulness should not simply be seized upon as the next promising cognitive behavioral technique or exercise, decontextualized, and 'plugged' into the behaviorist paradigm with the aim of driving desirable change, or of fixing what is broken" (2003, p. 145). As an academic in the field of education and more recently in counseling and art therapy, I remain mindful of Kabat-Zinn's warning in our approach to practising mindfulness in various aspects of my professional life.

Mindfulness plays an important role in enabling me to sustain my professional and personal life. As a transformative educator, I employ mindfulness in my mentoring of students – educators undertaking postgraduate professional development – as they engage in arts-based methods of research to help transform themselves and their institutional cultures (Taylor & Medina, 2013). As a transformative researcher, I am interested in how mindfulness, flow and creativity intersect to enhance critical, creative and ethical learning for sustainable futures, as part of citizenship education (Taylor, 2015). As an academic leading a stressful working life, yet committed to living out my altruistic values as an agent of social transformation,

I practise mindfulness in the form of yoga, meditation, art-making and poetry writing to maintain self-care, positivity and resilience.

In this chapter I illustrate how mindfulness practices help me to enrich my professional life. In exploring mindfulness I draw on theoretical perspectives from the fields of transpersonal psychology, Buddhism and yoga, positive psychology and education.

Spiritual Roots of My Mindfulness

Although the basic ideas and techniques of mindfulness practice are present in all major religious traditions of the East and the West, my own meditation practice draws on the Tibetan tradition of Buddhism. My practice, however, is backgrounded by a Christian upbringing in Catholic and Protestant traditions (within one household). I have some knowledge and great respect of Christian scholarship and its application to daily life, which has prevented me from throwing out the spiritual 'baby' with the ritualistic 'bathwater,' which would have been easy to do given the secular and often scientific (scientistic?) working environments in my past.

Buddhist traditions emphasize that mindfulness provides an important strategy on the path to enlightenment as modern Buddhist teachers such as Thich Nath Han, the Dalai Lama, and Geshe Kelsang Gyatso would readily confirm. These teachers base their teachings on ancient spiritual masters such as Nagarjuna, Je Tsonkhapa, Atisha, Shantideva or Chandrakirti, who in turn based their insights from the Buddha's teachings. Thus there is a long lineage of mindfulness teachings to draw on, all of which define mindfulness as a fundamental attentional stance (Kabat-Zinn, 2003).

Moreover, I have been a yoga practitioner for many years. I see mindfulness in my yoga practice, particularly in Yoga Nidra, which develops non-judging awareness of every part of the body. The core scripture of yoga – Patanjali's Yoga Sutra – uses the term 'smirti' which means "to be present" or "to be here now" (Roach & McNally, 2005, p. 15) which is often translated as mindfulness. In yoga 'smirti' is a vital step towards enlightenment.

MINDFULNESS – AND WHAT IT CAN BE

Given that the spiritual traditions lay claim to mindfulness and emphasize the importance of mindfulness on the path to enlightenment, it may not come as a surprise that people who do not deem themselves either religious or spiritual, and particularly those who align their worldview with the Western modern scientific paradigm, may feel uncomfortable with acknowledging the spiritual links of their mindfulness practice. This sense of unease results, as Kabat-Zinn mentioned earlier, in a tendency to ignore or downplay the spiritual roots of mindfulness.

One of the most profound Buddhist teachings is the teaching on impermanence: everything changes all the time, nothing stays the same. Not even mindfulness is exempt from its effects, as demonstrated vividly in the Buddhist Magazine

'Tricycle' which recently published an article by Jeff Wilson (25 July 2014) titled, 'From Monastery to Marketplace.' The essay explores the new hype around mindfulness represented by popular best-sellers such as *Mindfulness for Dummies*, *Mindfulness Workbook for Dummies*, *Mindfulness at Work for Dummies*, and *Become more Mindful in a Day for Dummies*. In this popular Western context mindfulness is presented as a means to overcome stress and other banes of our modern lifestyle, especially workplace-pressure, depression and anxiety. The new generation of teachers, according to Wilson (2014), offers workshops, retreats and short courses that are widely available and thus have the potential to familiarize many people (who might not otherwise engage) with mindfulness. This could be regarded as the upshot of the 'New-Ageification' of mindfulness where people who are not keen on monastic seclusion and strict religious practice can, nevertheless, gain insights that over time might benefit them and others.

By contrast, Wilson (2014) sees the effects of the new mass-marketing and commercial diversification of the mindfulness movement as having created a vacuum in which teachers of questionable credentials now market their wares to the unaware (and unwary?) by downplaying the Eastern religious origins and foundations of mindfulness and over-emphasizing its marketable aspects for life-improvement through 'mindful' food choices, 'mindful' sex, 'mindful' parenting, and the list goes on.

It appears that today in the West there are three main representations of mindfulness: (i) mindfulness in its traditional make-up grounded in religion, meditation and contemplation traditions of East and West; (ii) mindfulness as a scientifically-supported mind-training minus the religious aspects, as promoted by psychologists and medical proponents; and (iii) mindfulness as a lifestyle that can be bought and sold.

Since Death Is Certain But the Time of Death Is Uncertain, What Is the Most Important Thing to Do?

As academics confronted with relentless pressure to reform higher education it is easy to feel dragged down and to start questioning one's own strength as one struggles to survive in academia (Murphy, 2011). For some, there is a background awareness of uncertainty asking, "how long do we have left to fulfill our potential in this human life?" Consequently, according to Pema Chödrön, many of us choose to bury ourselves in cocoons of habitual patterns in order to avoid thinking about the unavoidable. This renowned Buddhist teacher reminds us to break these habits by taking a break from our everyday lives and to 'wake up to the world around us' (Chödrön, 2008, p. 65). She suggests that most of us spend a considerable amount of our lives 'sleepwalking'. Psychologists concur and refer to this common but unhelpful state of mind as being on 'autopilot' (Snyder, Lopez, & Pedrotti, 2011). But before we too quickly dismiss as morbid Pema's reminder of our mortality we may want to consider the possibility that meditation on death is regarded as

one of the most powerful meditations one can undertake in Buddhist traditions: it actually serves as a call to life, reminding us to accept the unavoidability of death, to observe our fears and thoughts related to death, and subsequently to make a commitment to seize the moment whilst we still have it, to stop multi-tasking, jump off the hamster wheel, and recognize that it is high time to wake up from auto-pilot and to live our lives more consciously and more fully than most of us do on a daily basis.

The practice of noticing and accepting our thoughts and feelings without judgment and committing to action, as Buddhist teachers recommend, is very much in line with Acceptance and Commitment Therapy (ACT), although Harris (2008) hastens to stress that mindfulness in the context of ACT is not meditation nor will it lead to enlightenment. Whatever interpretation of mindfulness one wishes to subscribe to, it seems that a pragmatist perspective could be that we should do whatever works for us, with – or without – spiritual aspects attached, yet without disrespectful dismissal of the original roots of mindfulness practice as Kabat-Zinn has suggested.

Mindfulness as Self-Care for Academics and Therapists

Having been a teacher, teacher educator, and research supervisor for many years, more recently, I added counseling and art therapy to my academic and professional life. This has raised my awareness about the importance of self-care and burnout prevention for everyone working in the human services sector, which includes both the counseling/therapy and education professions. There is an ever-growing body of literature on therapist self-care, and much of it contains links to mindfulness practice, not just with a view to countering the constant threat of burnout but also to enhance the therapeutic relationship (or therapeutic alliance) between counselor and client, which has been widely described as the most influential factor when considering the effectiveness of therapy.

I have not been able to locate the same wealth of literature in the education area emphasizing the need for self-care in order to fulfill one's moral obligation to be at one's best when dealing with students of any age. I am convinced, however, that in education the equivalent of a good 'therapeutic alliance' exists in the relationship between teacher and student. In academic life this would, for example, be referring to the relationship between the research supervisor and her/his student. For this relationship to flourish, much like in counseling, certain attributes need to be in place.

Shapiro and Carlson (2009) remind us of the frustration of engaging with a person who is not mindfully with us: "…the person's eyes dart around the room or a glazed look appears, the person seems to be miles away in his or her own thoughts and doesn't respond appropriately to your words and actions, or maybe the person comes and goes, seemingly to listen for a while and then tune out" (p. 19). Shapiro and Carlson (2009) ask us to, "contrast this with what it feels like to engage

with someone who is consistently attuned to your experience, who looks into your face and clearly resonates with your emotions in his or her eyes and body, who is focused on listening to what you have to say" (p. 19). They add that engaging with someone who is fully present – be it a therapist or a research supervisor – has the potential to instill in the client/student the impression that she/he is seen, heard, and understood. Thus for Shapiro and Carlson, mindfulness practice is vitally important to strengthen the therapeutic relationship and – I would add the student-supervisor relationship by increasing the therapist/supervisor's attentional capacity, presence, empathy and attunement towards the client/student. In addition mindfulness is likely to strengthen the therapist's/supervisor's self-compassion and self-attunement, and emotional self-regulation (Shapiro & Carlson, 2009).

Noticing the Flow within and without

Being mindful allows me to observe stillness whilst simultaneously observing 'flow': the flow of breath, the flow of movement, the flow of words onto paper, the flow of creativity when colors mix and forms take shape i.e., noticing the flow rather than influencing it – being absorbed in the moment. This sense of flow and its links to positivity have been the focus of studies in the field of positive psychology. The need for stress reduction due to the detrimental effects of cognitive, emotional, physiological and behavioral stress factors on physiological as well as our psychological health is of central importance to all professionals. Given the personal cost of physical discomfort and depression, as well as the financial cost to society of widespread loss of productivity and performance due to stress-related illnesses, stress reduction programs have moved onto center-stage. Positive psychology, with its focus on resilience building, positivity, strengths, creativity and flow, has added a valuable lens through which I shall now explore mindfulness.

The Nexus between Mindfulness, Flow and Creativity

In their book, 'Positive Psychology: The Scientific and Practical Exploration of Human Strengths', Snyder, Lopez and Pedrotti (2011) refer to psychologist and Nobel Prize for Economics recipient, Daniel Kahnemann, who divided the day into 16 waking hours and eight sleeping hours, and then divided the 16 hours into 20,000 moments of 3 seconds, and finally asked, "What happens to these moments?"

From a positive psychology perspective, a day presents us with 20,000 opportunities to engage deeply with our lives, to learn to overcome negativity and to pursue positivity. Positive psychology encourages us to add intentionality to our belief that every moment has potential by engaging in mindfulness, absorption in the moment (i.e., flow), and a basic spiritual outlook on life. Using mindfulness in this way we switch from autopilot (i.e., mindlessness) to increased self-regulated attention and raised awareness.

Ever since Mihaly Csikszentmihalyi was first intrigued by artists who persisted single-mindedly with their artwork, disregarding hunger, fatigue and other discomforts, only to lose interest in the creation once it had been completed, positive psychologists have been exploring how a state of complete absorption in a task can come about in the first place. Csikszentmihalyi identified two basic conditions that enable the state of *flow* to occur: flow happens where the skills or strengths of a person match the challenge or difficulty of a task. If there is a mismatch between these two factors flow will not occur; that is, if the challenge is too great given existing skills then anxiety can result, whereas challenges that are too easy for existing skills can lead to boredom (Csikszentmihalyi, 2008).

Csikszentmihalyi's 'flow theory' has shed light on important aspects of intrinsic motivation, that is, reasons why people persist with challenges despite the obvious lack of external reward. He described flow as consisting of several components: (1) merging of action and awareness, (2) centering of attention, (3) loss of self-consciousness, (4) a feeling of control, as well as (5) coherent, non-contradictory demands for action, and (6) clear, unambiguous feedback. He linked the ability to achieve flow to the concept of an 'autotelic personality.' Autotelic personalities are characterized by high levels of curiosity, persistence and low self-centeredness possessed by a person who enjoys life and generally does things for his or her own sake rather than for external reward. This trait seems to be very important for people working in high-stress, high-challenge environments that require them to be intrinsically self-motivated and display high levels of resilience, that is, the ability to thrive in the face of adversity, to bounce back from trauma, and to adopt adaptive patterns of thinking and behavior that favor mental health in the wake of stress (Peterson, 2006).

I would argue that activities that lead to flow also include aspects of mindfulness, especially the aspects of attention and the merging of action and awareness. To me, flow can only happen when mindfulness is present.

Art Therapy in a Nutshell

Art therapy is much more than simply providing a client with a paintbrush and a jar of paint. It can include all the arts – writing, such as writing poetry or stories, movement and body awareness, sand play, woodwork, working with dreams, drama and role-play, music therapy and other forms of expressive art therapy. Whatever the modality there are similarities between all of them. The art process itself is viewed as an essential element of therapy by creating the conditions for creative activity and for healing, implying a strong focus on the doing part of the process as well as the end product (Rubin, 2011). Research on creative and expressive arts methods in therapy has reported increased self-esteem, improved socialization and psychosocial functioning as well as enhanced self-awareness, self-expression and improved psychological wellbeing (Coholic, 2010).

For the art therapist usually the initial step is to allow exploration – exploration of a material (a movement, a sound, etc.) as if experienced for the first time. For many people, it may be the first time they have experienced working with a material such as clay or pastels or moving their body consciously whilst noticing their breath – to me, the therapist brings mindfulness into the process from the word go. Although, some clients can be a bit confused by the initial ambiguity of 'just playing around' with the material without setting a goal. From a therapeutic point of view, it is exactly this ambiguity that can help bring to the fore unconscious ideas and feelings – similar to free association used in psychoanalysis. The next step consists of a period of incubation, that is, allowing the mind to work quietly, without conscious deliberation, on a creative problem at hand. This may involve putting the task aside for a while whilst allowing for periods of reflection and introspection. Eventually, the need for having a clear goal, organizing ideas, putting together, arranging, and elaborating a piece of work may arise, but when this happens is up to the client. As a basic rule for holistic art therapy modalities, it is essential that the client's expression and interpretation is given precedence over the therapist's sense of best or right practice – in other words there is not one way of doing art therapy. Furthermore, aesthetic judgment and interpretation lie entirely with the client.

So what, we may ask, is the art therapist's role in the process? The therapist's task is to reinforce creative behavior by offering different materials and by promoting utmost authenticity for the person doing the art. Flexibility and open-mindedness are essential for the work of an art therapist, as is sensitivity and attentiveness to the temporal and spatial aspects of the art process such as: activity versus passivity, tension versus relaxation, deliberation versus impulsivity, distractability versus involvement, reactions of disgust versus pleasure, and reluctance versus eagerness and other aspects. The therapist takes note of these largely non-verbal phenomena (Rubin, 2011).

Judgment gives way to increased awareness though this is not easy since our ego judges are deeply ingrained and often prevent us from fully engaging with the creative process – our inner critic is an obstacle to mindfulness. McNiff (1992), one of the most prolific writers on the topic of art therapy, has suggested viewing art as medicine. He talks about the *alchemical* power of art, which allows us to transform irritations into delight by offering an opportunity to step outside of ego-consciousness, which tends to lock onto things and get caught up in a single point of view. We can counter go-consciousness by adopting a beginner's mind and by stepping aside and by watching the ego. McNiff argues that art enables us to watch the ego as a psychic figure without being completely possessed by it, which makes art a most fundamental and useful technique (1992). The stepping aside process and watching the ego seems to not only coincide with aspects of mindfulness practice as described by Buddhist scholars, it is also reminiscent of what Harris (2008) has called the 'observer self' in the context of Acceptance and Commitment

Therapy (ACT). In art therapy, as in ACT, we avoid complete identification with our feelings and thoughts by letting them pass through us.

MINDFULNESS AND FLOW IN ARTS-BASED RESEARCH AND IN COUNSELING/ART THERAPY

> Start working right now, from this place, with the feelings you have at the moment. (McNiff, 1998, p. 75)

For me, to be an authentic professional, be it as an arts-based transformative researcher or as a counselor/art therapist – I need to express creativity in my own life rather than just speak or write about it. This is also an area of increasing importance for researchers wishing to enter the field of STEAM Education (Yakman, 2013) where the traditional focus on science, technology, engineering and mathematics has been expanded by adding in the arts. This is a field that I view as having great potential for creative educators. In the following section, I explore myself as a creative educator and provide an example of how art allows me to engage in mindfulness, creativity and flow. For this purpose I shall now consult some of the principles of transpersonal psychology and transpersonal art therapy.

Transpersonal psychology, used as a referent in this context, is defined as the psychological study of transpersonal experiences and their correlates. According to Walsh and Vaughan, transpersonal experiences are defined as "experiences in which the sense of identity or self extends beyond (trans) the individual or personal to encompass wider aspects of humankind, life, psyche, and cosmos" (1993, p. 3). Eminent transpersonal psychologists and writers include Abraham Maslow, William James, Charles Tart, Daniel Goleman and Ken Wilber (Tart, 1975). Of particular importance to the transpersonal field, especially for the area of art therapy and, by extension, for arts-based research, is Carl Gustav Jung's work on symbols, myths, the collective unconscious and archetypes. It is interesting to note that transpersonal disciplines are regarded as interdisciplinary and integrative by nature, thus already including disciplines as varied as psychiatry, psychology, anthropology, ecology, education, philosophy, spirituality and art.

Meditation – I refer to mindfulness meditation in particular – has been described as "the royal road to the transpersonal" (Walsh & Vaughan, 1993). Meditation research is now one of the key aspects being researched by transpersonal psychologists, although their focus is likely to be different from that of cognitive psychologists. Transpersonal researchers have reported that meditators notice their inner and outer perception being enhanced by becoming more sensitive – colors seem brighter and the inner world as a whole becomes more available through a process known as 'introspective sensitization.' McNiff (1998, p. 16) explains that, "just as the meditator practices staying with the object of meditation no matter what thoughts, sensations, or other distractions arise, the artist learns to stay connected to the image being constructed and the process of creation, assimilating whatever

occurs into the creative act." Peak moments or 'being in the zone' occur when one is in sync with one's surroundings, "when the chemistry is right. Everything fits. The process carries us as we work together with it" (McNiff, 1998, p. 20).

Mindfulness as a path into the unconscious has found its way into holistic art therapy practice and is regarded as helpful for a wide variety of people and problems. Integrating mindfulness practices in creative art processes can teach clients to relax when doing art, to better cope with day-to-day problems, to become less judgmental of themselves, and to form more positive and healthy relationships with family and peers (Coholic, 2010). To me, as a counselor and art therapist, the link between mindfulness, meditation and art creation is vitally important. In order to illustrate how mindfulness practice and creativity link to my current professional context I embrace a transpersonal approach and engage the reader in an archaeological excavation of my personal history, focusing on times in my life when creativity was free flowing and on those when it was hampered by many obstacles. For this purpose, I engage with the archetypes of order and chaos represented in ancient Greek myths in the form of Apollo and Dionysius – their struggle representing my inner struggle to live out creativity. Having introduced the reader to basic art therapy concepts, I shall now present the final artwork – a collage representing the Apollonian and Dionysian struggle in my life. Subsequently I explain how I created the collage, outline the art therapy process in several steps and finally discuss what I have learned from the experience.

The Myths of Apollo and Dionysius

In his seminal work, "The hero with a thousand faces," Joseph Campbell explained that "…religions, philosophies, arts, the social forms of primitive and historic man, prime discoveries in science and technology, the very dreams that blister sleep, boil up from the basic, magic ring of myth" (Campbell, 1973, p. 3). Campbell (1976) reminded us that, for Jung, the collective unconscious appears to consist of mythological motifs and suggested that mythology itself can be viewed as a projection of the collective unconscious. The characters in myths are representations of aspects of the collective unconscious – and thus of ourselves. Jung referred to them as archetypes.

Over the centuries philosophers and writers have pondered over the significance of the mythological dichotomy between the Apollo-Dionysian archetypes. For Friedrich Nietzsche, a delicate balance is required between the Dionysian traits, representing our chaotic nature, and our Apollonian traits, embodying the harmony and order that exists within our chaotic experience (Del Caro, 1989). To him, the harmonious interplay of Apollo and Dionysius is the major premise driving the creative arts (Sloterdijk, 1989). From a transpersonal perspective, many of our inner conflicts can be traced back to living out traits of our Apollonian or Dionysian archetypes, which represent our longing for order and stability on the one hand and our craving for ecstasy and chaos on the other.

Apollonian characteristics have been described as marked by reason, logic and controlled conduct whereby ecstasy is only allowed under certain religious circumstances. By contrast, Dionysius represents ecstasy in its many forms whereby playfulness is welcomed, rules are fluid, sex and sexual expression are widely acceptable and accepted. It appears that rather than regarding them as opposites, which is a common modern day interpretation, the ancient Greeks revered both Apollo and Dionysius as gods and viewed them as inextricably interlinked (Locke, 2014a,b).

Excavating Apollo and Dionisius – Lily's Archaeological Excavation into Life's Struggles

> What disturbs you the most may have the most to offer in your creative expression. (McNiff, 1998, p. 69)

The example I present in this chapter is an art therapy activity that can be used with a client in a therapy setting – in this case I am my own client. As preparation for exploring my inner creative struggle I kept a journal over several weeks and subsequently created an artwork – a collage – that would represent to me those inner struggles that have hampered my creativity throughout my lifetime.

Before proceeding, however, it is important that I provide a brief explanation of art therapy and how it works.

Creating a Collage as an Example of Transpersonal Art Therapy

Step 1: Apollo and Dionysius in Lily's life. The artwork, a collage, was created over a period of several weeks and included steps, such as: journaling, incubation of ideas, finding materials, meditating on, arranging, re-arranging and fixing the materials to the surface, and exploring meanings through experimenting with distance and perspective (see Figure 1).

My most treasured possession in my early years was a set of colored pencils given to me by an uncle who was an artist. During my teenage years I received great encouragement from art teachers and I particularly enjoyed outdoor drawing sessions in the center of my hometown in Austria, which dates back to the Middle Ages with excellent examples of Gothic structures and motifs. However, given the predominant focus of my parents, especially my father, on science and medicine, my initial wish to study 'something to do with art' was not honored, let alone taken seriously. Before long I found myself studying medicine. Halfway through the degree I switched to a biology degree. Still not satisfied I switched again, this time to secondary science teaching since education appeared to be more humanistic than pure science. More contact with people would seemingly allow for more creativity to emerge. In those days I used creativity to make my science classes engaging and interesting, to find

innovative ways to teach and to motivate the students. Moving into a teacher-educator role at university, however, I was suddenly firmly back on Apollonian ground with rules and procedures to follow that were more important than human contact and creativity. I lasted in that position for ten years after which I opted to study for a master's degree in counseling which, I felt, would bring me closer to people again.

On finishing that degree I came across information on an art therapy course, which I instinctively felt was closing the circle. I had returned back to the arts where I had started much earlier in life. Looking back, I can say now that some of the major crises of my life have had aspects of an Apollonian and Dionysian struggle. Moreover, I can see now that it is not only possible to connect my Apollonian and Dionysian traits – rather than viewing them as polar opposites – but it is essential to do so.

Step 2: Translating Insights from Journaling into an Artwork

> When you are convinced that you have no artistic abilities, start gathering things. Keep them and arrange them into aesthetic configurations, and you will find that the things will invite you into the world of design and creative expression. (McNiff, 1998, p. 109)

I did not set out to create a collage – it just happened as I was struggling to come up with an idea for a piece of art to illustrate my Apollonian and Dionysian struggles. Collages are popular in art therapy because they allow clients to represent their thoughts, concerns, attitudes and feelings in a non-threatening way by encouraging clients who are new to art, intimated by drawing or painting to overcome their challenges. Collage can do this because images and materials are readily available and because there is no right and wrong (Malchiodi, 2007; Buchalter, 2009). Collage not only encourages self-expression but also the uncovering of unconscious content (Hyland Moon, 2010).

I started my collage by collecting newspaper and magazine clippings and photos, hoping they might inspire my creative spark. Without much planning I picked items that 'somehow spoke to me' without trying to think too much. Some of the images were very colorful, others were merely black and white. At this point I could not see how they all fitted into the bigger picture. Whilst initially I had a vague idea about wanting to create a painting, I eventually settled for a collage as my art piece since I had collected enough material.

In the beginning there were just words… I noticed that when I first started collecting materials for the artwork I focused mainly on text such as headlines, whole words and sentences from magazines and newspapers. I sat with those words and phrases and meditated on them – brought my awareness to the word, the image of the word, the sound of the word. At that time it was easier for me

Figure 1. Apollo and Dionysius in Lily's life – collage

to relate to words rather than to images. When I was finally ready to investigate my collection two categories of words started to emerge. Words such as order, stability, plans, focus, measures, search, evolution, strict, push, law, test, one-track-mind, safety, and fear seemed to be linked to what I eventually identified as Apollonian characteristics. The second group contained words and phrases such as sound, color your world, poetry, fiesta, explore, experience, start living, inspirational, splash, beautiful, fun, flying high, culture, spirited away to dreamland, games, happy, free, fizz, madness, complex, and touch – all of which I linked to Dionysian aspects.

Then came the images… I chose images without too much thinking, based on their emotional impact on me. When I felt ready to explore my collection of images two categories appeared: I had picked many colorful images to do with children, games, colorful patterns, colorful characters, interesting faces, painted faces, lovers, dress-ups, models with crazy hair-dos, the Tardis of Dr Who, happy people and beautiful landscapes (see Figure 1). The remaining images were dull or black and white. Amongst those bland images is a photo of the Australian Catholic Cardinal Pell, a female suicide-bomber in a black burqua, and a mass running event (see Figure 1). Whilst the colorful images seem to evoke a Dionysian joie-de-vivre, the dark, black and white, dim-colored images appear more somber, stricter, more orderly, structured – more Apollonian in nature.

And then came the drawings… In addition to collecting images and words, I made a series of small drawings using colored pencils that related to my biological and geological studies (Apollonian phase). I remembered back to a time when, as science students, we were required to 'draw what we saw' as close to reality as we possibly could. This applied to what we saw through the microscope and our dissections of plants and animals. The purpose of these 'art pieces' was not so much to create art but rather to get us to focus mindfully on what was before us in that very moment, to look and observe closely without distraction and to anchor the image forever in our minds. I decided to include these drawings in my collage (see Figure 1).

Step 3: Connecting

> As we contemplate physical forms, we discover a corresponding structure and focus in our lives. They help us to see ourselves. (McNiff, 1998, p. 100)

After collecting and sorting the materials I started assembling the collage. I soon realized that I had collected much more material than I could possibly fit onto one poster. Thus, once the creative process of collecting, sorting and trying to make meaning had started I found it difficult to draw a line and to stop. Having arranged

and re-arranged words and images for about two weeks I was still not ready to glue down the bits and pieces, which would have meant committing to a final set-up.

One night I dreamed that I had to add something about my soul and how it had been affected by the Apollonian-Dionysian struggle. Thus on checking the remaining clippings, I heard in my mind two sentences, "Soul is a four letter word!" and "The soul IS the world!" I came to the realization that these two sentences represented the lifelong struggle between my Apollonian traits and my Dionysian traits: I had traded the fullness of my soul with all its richness, color and creativity for scientific reductionism reducing my soul to a mere four letter word.

This insight struck me to the core and I had to step back from finishing the artwork for a while. When I returned to it I 'wrote' the two sentences using letters from newspaper headlines and placed them at opposing ends of the collage. "The soul is the world!" – the summary of my Dionysian aspects is now situated in the top left corner of the collage on a round piece of yellow paper representing the sun (see Figure 1).

I then created a funnel-like structure from red cardboard that now occupies a central position in the lower part of the collage. The funnel is filled with scientific symbols and my color-pencil drawings created when reminiscing about my university studies in the science field. The funnel empties into a black cone-like space containing the sentence, "The soul is a four letter word!" (see Figure 1). Thus the funnel is a representation of scientific reductionism. I added in the word 'not' later to express that I no longer blindly subscribe to reductionism.

It was relatively easy to see how the colorful, child-like and playful images related to my Dionysian traits. My lifelong love for colors, culture and poetry seemed written across those images telling my story as a child and teenager who loved art and whose world was magical and full of mystery. My Dionysian images are arranged in the top part of the collage (see Figure 1). The images that appear rather dull in the left lower quadrant of the collage are connected to words such as order, fear of chaos and the need for stability (see Figure 1). However, whilst I could recognize that these images and words represented my Apollonian traits, I was yet to understand how spirituality and my Apollonian fear aspects could fit together.

Examining 'border-crossers' On closer examination, there were two images that stood out for me since they seemed to cut across the borders between the Apollonian and Dionysian myths: (1) a smiling, happy looking man lying on his back wearing a black t-shirt that says, "Are you mad?" and (2) a dark-skinned woman with an amazing spikey hair-do who is dressed in dark colors yet through her expressive hairstyle instills a sense of outrageousness and preparedness to experiment (see Figure 1). I knew they were important yet found them difficult to place initially since I could not place them into either category. Thus I left their positioning on the collage till later.

Step 4: Stepping back and making meaning

> I will encourage you to look and re-look, sift and probe, upend and reverse, twist and turn, because ultimately, as the classical adage advises, the process of creation is "in the eye of the beholder." (McNiff, 1998, p. 12)

I repeated the process of standing back from the artwork and moving up closer several times. I turned the collage on its sides and upside down in order to glean different perspectives and insights. Whilst I was doing this, I was completely mindful, present in the moment and in the flow.

Looking at the collage from a distance, I noticed that the upper half of the collage was dominated by images and words seemingly connected to Dionysius whilst the lower part was dull and structured with clear divisions into sections (Apollonian) with the funnel serving as a visual organizer and divider. On the rim of the funnel there are three words that stood out: duality, mind and crisis. To the right side of the funnel the theme seems to be higher education and science, which obviously represents much of my training and professional life. To the left there are religious/spiritual motifs that seem united by a need for control, establish order and control fear. After exploring the collage from afar I felt the need to accentuate the divisions in the lower part of the collage more by using thick red paint to further delineate the separations.

Seeing the links

> Looking is a creative discipline in its own right. (McNiff, 1998, p. 204)

I repeated the process over several weeks during which I digested and re-visited insights before I could finally commit to finishing it. What helped with that commitment was that I stumbled across three sentences/phrases in a weekend newspaper: (1) "fear factor needs a reality check!" (2) "one-track mind' and (3) "almost an act of suicidal heroism." I suddenly realized that these sentences were the 'missing links' to complete the work – and I 'knew' exactly where to put them.

Stepping back, now I could see that the woman with the crazy hair could be representing my soul. She connects the upper and the lower halves of the collage. Next to her on the ground lies the smiling man who could be interpreted as my animus, that is, my masculine aspects – according to Jung the masculine aspects of a female are referred to as her *animus*. My animus is covered with a blanket that reads, "*one-track mind.*" Both are standing/lying on a path with words as cobblestones, for example, madness, forgotten, games, fears and safety and happy amongst them.

I finally came to see that, for me, developing a more masculine, one-tracked mind – a result of my education and work environment had for fear of safety – caused me to forget my child-like, all-encompassing and playful aspects. This seems to have been the true madness of my life – swapping creativity for reason and

believing that having one means giving up the other. The sentence "*almost an act of suicidal heroism*" therefore sums up the madness of my attempts to be one OR the other.

Through engaging in this art therapy experience I have come to recognize that I almost allowed my life to slip exclusively to the Apollonian side (university, science education) where I felt safe yet always slightly out of place. Not accepting that I have both Apollonian and Dionysian traits in me pushed me to the brink of 'soul-suicide' resulting in difficult phases during my life.

Step 5: Exiting the Process

It was interesting that I knew intuitively when I had arrived at the finish line because when I stood back and took in the whole image mindfully it felt 'complete.' That was when I could truly step back and let go of the artwork.

WHAT I LEARNED FROM PRACTISING MINDFULNESS AND ART THERAPY?

Taking time and allowing myself to be in the moment and to apply non-judgmental awareness, in other words being mindful during various steps of the art process and not allowing my inner critic to create obstacles to my creativity, has taught me how mindfulness is an essential ingredient in establishing flow. Without flow, challenges in professional life can be stressful rather than energizing. Without flow, creativity remains underdeveloped. Without creativity, professional life becomes stale and boring. I have learned that in order to practise self-care as a professional regular practice in mindfulness ensures that I enter flow states regularly. This enhances my creativity and makes me a happier and more resilient professional – be it as a therapist or as an academic in higher education. Finally, when I gain insights about myself that have hitherto been hidden from my conscious awareness, that is, when my mind changes – be it through mindfulness meditation or through the mindful art therapy process – my brain changes. As Hanson and Mendius remind us, "even fleeting thoughts and insights leave a mark on the brain" (2009, p. 5). At this point, art, spirituality, psychology and biology meet in the transpersonal field to witness a person's self-development (and transformation).

Returning to the Harbor

In this chapter, I have endeavored to explore the role of mindfulness in my personal and professional lives. For this purpose, I embarked on a journey that took me from mapping my understanding of the concept of mindfulness to linking it to flow and to creative expression. In the second half of the journey, I engaged the reader in a transpersonal art-therapy process excavating favorable and detrimental factors that have influenced the expression of my creative qualities. For this purpose,

I drew on Greek mythology, specifically the myths of Apollo and Dionysius, to explore the dichotomy between a need for order and predictability (reason) and a need for free artistic expression. Through engaging in the art therapy process, I learned that, for me, the mistaken assumption that reason and creativity were mutually exclusive was akin to soul suicide. As Friedrich Nietzsche observed, creativity is the child of the ongoing struggle between the Apollonian and the Dionysian archetypes. My task now is to remain aware that there needs to be a balance between both in order to bring out the best in me.

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XICOTÉNCATL MARTÍNEZ RUIZ

3. CONCENTRATION IS THE SEED

Conscious Attention in Educational Scenarios

ABSTRACT

In this chapter I explore the relevance of conscious attention and its potential in the sphere of educational purposes. Education illustrates concrete applications of conscious attention in our time. Specifically, I introduce the idea that a secular treatment of techniques of attention and concentration, embraced by the Sanskrit word and concept *dhāraṇā*, and as part of the Indian tradition, can reveal pathways to approach one of the problems confronted by young people as well as by the Mexican educational system, as in other parts of the world: violence, high sense of egocentrism, and a higher risk of stress. In that triad or as a part of it, there are many interrelated problems, I shall note two in this chapter: the lack of conscious attention in young people and a reduction in reading literacy in 15 to 24-year-old Mexicans. My central thesis is that piquing reading interest implies more than pedagogical techniques but also is inclusive of secular treatment of elements derived from practices of Indian tradition, in particular directed attention and sustained concentration; and its application in the development of a non-violent, less egoistic dispositions and in dealing with contemporary stress in young people. These applications have an impact in reading literacy – among other problems in education.

Keywords: conscious attention, *dhāraṇā*, reading, meditation, youth education

A BRIEF INTRODUCTION

Conceptually, an introductory uniting theme for this chapter is on the one hand, very simple and, on the other, quite complex because intrinsically there is an interdependent call to other disciplines. In addition, an introduction is an invitation to go fully along a path. Those who go forward must reinvent and recreate such a path. Thus, the introduction must offer some basics, hoping that some of what I provide is interesting for the reader.

As a beginning I recognize the first cultural and intellectual encounters between Western and South Asian philosophies. Megasthenes and his work *Indica* (Circa III c. BC) is a key reference for building such an understanding. Many centuries later, O' Hernius reconsidered the ideas of inclusion and exclusion of Asian thought

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 47–58.

in the history of philosophy (Halbfass, 1990). A relevant case is the French view of Saint Hillaire in his *Dictionnairie des sciencies philosophiques* (1844), in which he mentions the relevance and urges the study of Indian systems of thought in the History of Philosophy. In a very luminous case from the 19th century, Arthur Schopenhauer (1818) wrote in the preface to *The World as Will and Representation*, about the centrality of Indian philosophy for future centuries. Even though Schopenhauer had limited access to the philosophical texts of India, his assertion was enough to begin a systematic and serious study of a tradition that had the potential to provide a different treatment of problems that Western thought confronts in many areas. At the beginning of the 20th century, William James (1902) also anticipated that Buddhism would have a relevant influence on Western psychology. In the last quarter of the 20th century, the visions of Schopenhauer and James became manifest, not only in the philosophical field, but also in psychology, informatics, medicine, and logic in the treatment of paradoxes using the comparative ways described by Indian philosopher Bimal Matilal in *The Character of Logic in India* (1998).

In this chapter I explore how education illustrates concrete applications of conscious attention in our time. The main purpose is to introduce the idea that secular treatment of techniques of attention and concentration, embraced by the concept of *dhāraṇā* in Sanskrit, and as part of the Indian tradition, can reveal pathways to approach some of the problems confronted by young people as well as by the Mexican educational system, as in other parts of the world: violence, high sense of egocentrism, and a higher risk of stress. In that triad, or as a part of it, there are many interrelated problems such as the lack of conscious attention in young people and a reduction in reading literacy in 15 to 24-year-old Mexicans. To increase reading interest and abilities is not a matter of reading just 20 minutes per day in the classroom or in the house. Increasing reading interest involves more efforts to extend beyond the school but is also inclusive of the secular treatment of elements derived from practices of Indian tradition, in particular directed attention and sustained concentration, *dhāraṇā*, and its application in the development of reading literacy.

The structure of this chapter is simple. The first part introduces the general problem of deficiency of reading literacy in México. The second part aims to provide reasons that postulate a secular treatment of attention, concentration, and meditation and its contribution to providing a solution to a lack of attention, violence, and a decrease in reading literacy. The third part provides examples of programs applied in other countries that demonstrate the potential of an Indian tradition in solving contemporary problems. Finally, a series of conclusions is presented and a secular intervention program is recommended that integrates elements derived from attention, concentration, and meditation practices in adolescents studying at the secondary education level. A previous version of this chapter, offering just one part of my research, less technical, shorter, and without the investigations of specific Sanskrit texts, was published in 2011 as "*Dhāraṇā*: Atención dirigida y concentración sostenida. Un análisis del rezago de lectura en adolescentes mexicanos."

THE GENERAL PROBLEM OF READING LITERACY DEFICIENCY

The impact of a lack of reading literacy on failure rates and consequentially, dropouts, is undeniable. Secondary school dropout rates are a serious problem in the Mexican educational system, as compared to other countries of the Organization for Economic Co-operation and Development (OECD) (Instituto Nacional para la Evaluación de la Educación, *La educación media superior en México,* 2011, p. 67). The causes are numerous and complex but for dropouts among 15 to 17-year-olds: it is the lack of interest in attending school (Secretaría de Educación Publica, 2012), which is associated with violence as well as a decrease in reading literacy.

A decrease in reading literacy is an indicator of two major societal problems. On the one hand inference, comprehension, and conceptual content application skills are not present at ideal levels in the intellectual activity of the studied group. On the other hand, it indicates a lack of attention and enjoyment of reading, associated with a strong sense of disconnection between textual materials and daily life.

Both problems can be analyzed in a larger context, within an international framework that evaluates reading literacy as a foundation for exploring the abilities of a student in other areas of knowledge. I am referring to the PISA test, carried out by OECD. Since 2000, research focused on decreasing reading literacy or ability cannot disguise the PISA test results from 2000 to 2012. The 2000 and 2009 evaluations were focused on reading literacy, but the latter included a reading evaluation of electronic texts. PISA evaluates a neural stage in the training of students between 15 and 16 years of age. This formative stage is particularly important for this paper, above all in its relationship to two cognitive processes evaluated by the PISA test, namely:

- the ability to understand concepts, and
- the ability to act in specific situations, such as problem-solving. Both are part of the foundation of what I call "reading literacy."

What we need to develop is the ability to act in specific situations with attention and concentration. The OECD defines "reading literacy" in the following way: "understanding, using, reflecting on, and engaging with written texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society. This definition applies to both print and digital reading" (2011, p. 19). Upon evaluating reading literacy, the PISA test focuses on the following aspects: comprehension of the text and its language, the ability to infer contents, and above all to relate them inferentially with other contents. In other words, for the PISA project, the cognitive competency evaluated in the student is summed up in three skills: to retain information, interpret, and reflect on its content: "the aspect *integrate and interpret* covers a very wide variety of cognitive tasks, including inferring the connection between one part of the text and another, processing the text to form a summary of the main ideas, identifying the distinction between principal and

subordinate elements…" (OECD, 2011, p. 72). In this way, the PISA test examines different dimensions of the reader's experience and his/her analytical ability related to the (1) format of the text, print or digital, (2) the process of learning contents and (3) context. This means that the three aforementioned skills need attention of the mind; not just a mechanical reading process but a confluence of concentration and full attention in the present moment.

I use the three skills evaluated by the PISA test to serve as a contextual point of reference to outline the general problem of a decrease in reading literacy in México by offering the following scenario: imagine a student with limited ability in resolving assignments that require concentration and problem solving ability. The implication of lacking this ability means that it is very difficult for this student because of limitations in inferring new information, critically evaluating a text, interpreting meanings based on language indicators, and establishing connections among different parts of a text.

The ability to react through different intellectual operations, such as understanding concepts, inferring new information, and critically evaluating a text, evaluated by the PISA test, are also conditioned by different extracurricular factors, not necessarily related to the academic training of a student. As a result, it is difficult to come to the definitive conclusion that "a country is failing" in reading comprehension, mathematics or sciences from an analysis of the results of the PISA test. The evaluation is a relevant indicator that, rather than "failing," allows an objective contextualized representation of the unique challenges of a country's educational system. In México's case, in order to interpret the results of a decrease in reading literacy evaluated in 2000, 2003, 2006 and particularly 2009, we must take into account a core interrelationship between the psychosocial factors of attention and concentration, which are currently affecting Mexican youth between 14 and 24 years of age. This interrelationship is important because it affects the very population evaluated by PISA – youth between 15 and 16 years of age.

What does this interrelation between psychosocial factors, attention and concentration mean, and what relevance does it have to reading performance? As described by Guilherme Borges, Ricardo Orozco, Corina Benjet, María Elena Medina-Mora (2010): "Suicide has been increasing among Mexicans 15–29 years old since 1970. Accordingly, Mexican youth, as well as others in the world, are at a higher risk of stress, chronic depression, and suicidal tendencies. In adults aged 18–29 years the lifetime prevalence of ideation was 9.7%, and attempt 3.8%" (p. 290). The groups previously considered vulnerable to these problems were adults, but now they are affecting a different sector: youth between 14 and 24 years of age (Borges, Orozco et al., 2010). Directly or indirectly, this group is being affected by violence in the social environment, which makes the adolescent vulnerable to stress disorders and serious depression. Both disorders affect the capacity for attention and concentration due to the following reasons, which I consider central to reading literacy:

- They obstruct the ability to be completely present.
- They inhibit the capacity to observe mental content and distinguish between subjective contents and objective facts.
- They hinder the ability to connect ideas from a mental and emotional state of arousal.

The influences of psychosocial factors that generate stress and severe depression should be contextual variables that I considered in the evaluation of PISA tests, since such factors reduce the intellectual capacities of adolescents. What I mean by this is that reading literacy is not an ability conditioned only by the academic environment. The mental state of a reader is going to nuance or radically alter his/her capability to infer new information from already existing information, as well as his/her critical evaluation of a text. Therefore the mental state of a stressed or depressed reader – or one who is absent from the present moment – will not allow the immediate interpretation of meanings from language-based indicators in texts or the establishment of connections in concepts from different parts of a text.

In summary, and simply put, I regard the general problem of a decrease in reading literacy as learning to think, albeit in a difficult social environment. However, thinking requires mental clarity and the necessity for thought. The latter is part of a young person's daily environment, but the former, which is mental clarity, is a key point in attention and sustained concentration beyond a complicated and violent social environment. We have reached a moment in which the practices of attention, concentration and meditation from the Indian tradition become important as an attractive program with potential in our era.

DHĀRAṆĀ: DIRECTED ATTENTION AND SUSTAINED CONCENTRATION

The purpose of this section is to present the idea of the secular treatment of concentration and meditation techniques in the context of reading deficiency in Mexican youths. However, reading deficiency is an example; the effects and relevance of sustained concentration are beyond improving reading literacy. Here, I offer a modest example of how the centrality of such practices can illuminate, for the future, ways to face the technological risks that we presently create for humanity. Research that supports this idea is based on the concept *dhāraṇā*, which is explained in the *Vijñānabhairava,* a Sanskrit text, considered as an authoritative source of wisdom by Kashmir Shaiva's tradition, as Bettina Baumer argues in her introduction to the English translation of the text. Baumer explains *dhāraṇās* by going through different verses:

> It calls these ways "undistracted instructions" (*nistaṅga upadeśa,* verse 139), or spiritual instructions leading the mind to an undistracted, "waveless" state. In another summary verse (148) these methods are called *yukti*, which has the double implications of *yoga* as spiritual method … The *dhāraṇās* contained

> in verses 82 and 83 recommend sitting on a seat (or lying in a bed) and making the body supportless (*nirādhāram*) by which practice one becomes free of mental agitation and attains a divine state. But in verse 82 this is attained by a quiet posture and by meditating on the body as being without any support, whereas in verse 83 this state is reached by movement of the body in a moving vehicle. (2002, pp. xxi–xxii)

Dhāraṇā is a practical method of maintaining non-distraction of the mind or *nistaṅga upadeśa*, and its objective is to direct the mind towards a state of sustained non-distraction and calmness. Even during intellectual activity or the plethora of ideas or thoughts that come and go in our mind throughout the day, the aim is to reach a state of sustained concentration. Secular treatment of these techniques has successful effects in societies of our time. Apart from using this for reading improvement, these techniques offer a specific change of paradigm, which can help to be in the present moment, to get more non-egoistic manners and to increase ethical consciousness.

To illustrate this, we can imagine the calm surface of a waveless sea. *Dhāraṇā* is a method that aims to quiet the mind, reducing and "emptying" its distracting contents. Mental fluctuations or differentiated perceptions are known as *vikalpas* in classic Indian philosophy and are commonly represented by waves in the sea. In the *Yoga Sūtras* of Patañajali we identify how our mind is intermingled in a continual flow of contents, sensorial data – that change at any moment – thoughts, memories, concepts, and so on. For this reason, the objective of this method is that the mind, tangled and constantly submerged in different distracting thoughts, can be attentive to the present moment without repressing, for example, memories, but rather observing them until they dissolve, without allowing these ideas or thoughts to create distractions or lead to depressive states.

What is the technique of directed attention? The *Vijñānabhairava* (Vbh), a text that was possibly located around the 7th century A.D., and which forms part of a longer text titled *Rudrayāmala*, is one of the oldest treatises focused on the study and description of 112 types of *dhāraṇās*. The Vbh has been considered one of the most complete references for understanding and moving deeper into the process of the Indian tradition of directed attention and sustained concentration known as *dhāraṇā*. The Vbh mentions the practice of focusing attention on our own consciousness, but how? An example described in the text is the following: focusing our attention on a single point at the start and end of inhalation and exhalation, at the start and end of each thought in a continual chain. In between each continual chain there is a short and sometimes non-perceptible way without deep conscious attention, to get in a delighted state of consciousness. The flow of mental ideas and thoughts from everyday life, the past, or our projections into the future, come together in the mental representation, which is why our state of attention is so fragile that it disperses, continuously disintegrates, and prevents the

use of intellectual abilities that require focusing on the present moment, such as increasing one's reading literacy.

An exercise as simple as fixing our attention on inhalation and exhalation is the starting point to directing attention towards a state of reduced mental distraction and to experiencing more equanimity through breathing. With regards to this, *Śiva sutra* or the *Aphorisms of Śiva* states: "The vision of equality is in equanimous breathing" (Martínez-Ruiz, 2008, p. 153). Anxiety and lack of concentration due to the constant flow of ideas and thoughts generate a state with no mental equanimity, leading to a lack of attention and concentration. Additionally, an equanimous mental state allows sustained concentration, without the urge to repress thoughts; in other words, the technique is to allow ideas or thoughts to dissolve to a point from which they emerge: the object of our representation merges with the subject that contemplates it, in the same way that inhalation and exhalation dissolve into the point from which they emerge.

This attention exercise continues with maintaining one's attention on an object, which enables maintaining the initial focus. The Vbh mentions that the mind can concentrate in different ways, for example on a part of the body, on a sound, on a space in between thoughts, on a point on a wall or an object, and can continue until reaching a state of sustained concentration that the Vbh calls "concentrating on emptiness." Another example comes in verse 40, which explains that one must concentrate and meditate on the point at the beginning and end of a word we pronounce. Another exercise that should be mentioned is in verse 41:

> If one listens with sustained attention to the sounds of a string instrument and others that are played successively and for an extended period of time, he will then become absorbed in the ether of consciousness. (*Vijñāna bhairava,* 2002, p. 44)

In this passage there is a simple technique of focusing attention: the music produced by a string instrument, such as a tanbur, a sitar, or a violin, enables directing attention until reaching a more profound and sustained level of concentration. The aim is to calm the fluctuations of the mind, which leads to a state of attention that could positively impact increasing reading literacy, as well as other possible benefits. I want to mention that in this case, not only is attention capacity acquired, but other benefits are also produced in the mental state of a young person due to reductions in stress levels. *Dhāraṇā* as a method to calm the mental contents is not only a fundamental part of the Shaiva tradition; an important precedent is also found in the *Yoga Sūtras* of Patañajali.

Another example of the usage of *dhāraṇā* is with Abhinavagupta (*fl. c.* 975–1025) a prolific writer and now considered one of the greatest minds of his time. He belonged to a school of Indian thought situated in the post-scriptural period that flourished from the 9th into the 11th century. To start with Abhinavagupta's conceptualization about *dhāraṇā* relates the attention and fixation of mind with a

more complex issue: the nature of consciousness. His ideas have been analysed in a wider conception of reality that situates his theory in the context of other Indian theories of consciousness. In Abhinavagupta's case there is an example of his ideas on *dhāraṇā* in his exegetical work, the *Mālinī-vārttika,* especially in the first verse of second part:

> Thus the Lord Maheśvara is one with the universe. One should worship Him with the [various] concentrations of the mind (*dhāraṇā*), through the sequence of knowledge and yoga. (Translated by Martínez Ruiz, 2010, p. 107)

And the text in Sanskrit:

> evaṃ maheśvaro devo viśvātmatvena saṃsthitaḥ/
>
> kramikajñānayogābhyāṃ dhāraṇābhir upāsyate //1// (Ed. by Madhusudan Kaul Śāṣtrī, 1921, p. 104)

I note to the reader that a group of 108 verses of this text was translated for the first time from Sanskrit into English (Martinez Ruiz, 2010) under the name, *A whirlpool of approaches: mapping the structure of the theory of the non-duality of consciousness in Abhinavagupta's Malinivijaya-varttika (2. 1-108)*; and related with another study narrowed down to a group of verses that was translated for the first time into English by Jürgen Hanneder (1998) in *Abhinavagupta's Philosophy of revelation. An edition and annotated translation of Mālinīslokavārttika I.1-399.* In the previous verse, *dhāraṇā* is part of the sequence of six ancillaries presented by older texts, for instance, Somadeva Vasudeva (2004) has noted how the sequence of other practices interrelated is similar with various revealed texts; those related with specific descriptions on how to get into states of deep consciousness where *dhāraṇā* is a sustained "practique" in everyday life. The sequence of practices interrelated where *dhāraṇā* has a place is as follows: *prāṇāyāma* or breath control, *dhāraṇā* or attention and concentration of the mind, *tarka* also known as sound reasoning, argument, logic, *dhyāna* which is meditation, *samādhi* or absorption in a state of joy, and *pratyāhāra* called withdrawal or fusion in the object of contemplation.

CONSCIOUS ATTENTION

The aim of the third part is to provide examples of past programs that have incorporated elements derived from meditation practices to attend to issues such as stress, depression and a lack of concentration. Mentioning precedents in research that have studied the potential of Asian thought provides a necessary framework because it gives us access to experimental evidence that helps validate our hypothesis in the field of educational research. One example comes from William Linden (1973), who researched the effects of meditational practices in children; this paper is a pioneer in demonstrating the relationship that exists between anxiety and the cognitive skills involved in what we understand as reading literacy.

Another relevant study that has produced implementation programs since the beginning of the 90s is known as mindfulness, which is the secular treatment of Buddhist meditational practices applied mostly in adults. Additionally, since 2010, a program called Mindfulness in Schools has been implemented in England with groups of young people, also revealing the potential of these practices in the treatment of mental and emotional disorders that affect academic performance and cognitive skills.

But what is mindfulness? The term refers to a state, or rather a particular kind of attention capacity in the present moment. In other words, a state of attention whose characteristics generally include openness, non-judgment and contemplation: this is the attention capacity known as mindfulness. Mindfulness has been implemented to reduce stress in adolescent patients between 14 and 18 years of age. This implementation has been researched since the mid 1970s in the treatment of adult patients with levels of stress, depression and suicidal tendencies. A program noteworthy for its potential efficacy is Mindfulness-Based Stress Reduction (MBSR). This is a psycho-educational program applied to daily life (Biegel et al., 2009). Research on the efficacy of mindfulness has been focused on adults in the 70s, with little research in adolescents; however, as Mark Williams and Jon Kabat-Zinn (2011) noted, after the 90s an interdisciplinary community of researchers has published more studies and academic articles.

One of the most recent applications of the mindfulness program, and of particular relevance to this article, is the implementation of a pilot study of meditation in the curriculum of students between 14 and 15 years of age. The program has been implemented in a weekly 40-minute class at the Tonbridge School in Kent, England. The program for the Tonbridge School was designed by the Mindfulnes Centre in Oxford and the University of Cambridge and was to be an addition to the curriculum that could help alleviate stress and develop concentration skills. Richard Burnett is one of the researchers who directs the course at Tonbridge, which considers the importance of the experience of silence and the state reached by the students in a practical context. This does not imply a religious imposition or conversion to an Asian religion because the focus, as has already been stated, is on the secular treatment of a tradition that can offer other methods to approach contemporary problems, as Mark Williams has noted (2011) and more recently Madeleine Bunting (2014) who suggested that we will come to see mindfulness as mandatory.

RETHINKING THE CONCEPT OF *DHĀRAṆĀ* IN OUR TIME

In 2001, after returning from a research stay in India, I directed two courses – one on methodology for Social Sciences and the other in philosophy – for students between 15 and 17 years of age in a dual secondary and vocational school. Among four groups, I implemented a program of attention and concentration techniques in four sessions; in order to have grounds for comparison, this short program was applied only to two groups, and in the other two groups I did not carry out or even

mention such a program. The four brief sessions were not part of a larger program based on mindfulness and sustained concentration because their only objective was to create a state of sustained attention to the central contents in both courses. The result was unexpected. In addition to the sustained attention of the groups, the contents were continuously assimilated, leading to the learning of the topics discussed. Without the tool of memorization, the contents of these sessions were remembered in a more fresh and applicable way, at least with regards to experience-based aspects. Based on this, and through research carried out from 2006 to 2011, I have to say that there are different elements in the Indian tradition that should be taken into consideration and that contribute to the improvement of reading literacy in youth between 15 and 17 years of age.

Programs such as Mindfulness reveal, for example, the potential of the Buddhist tradition. In this case, we find some theoretical basis for improving conscious attention; it is directly related to reading skills. And more important it is related to an attitude encompassing conscious attention and non-violent manners. As we know, contemporary education is facing diverse challenges that due to their magnitude surpass the scope of this article. If we analyze cognitive problems and the challenges in educational training which we face today, we will find it of great use to implement a series of connectors whose objective is to provide the student with the following abilities: a thought process that establishes conceptual connections among formal thought structures that require high levels of attention and, above all, require a student's concentration. Instead of fragmenting or separating subjects and presenting them as unconnected groups in the curriculum, it is necessary to augment a student's ability to think.

Improvement in reading performance at different levels is a central point in the solution of this issue and in the establishment of connections among different areas of study. The treatment of practices from the Indian tradition is a specialized strategy tested in different cases in the United Kingdom and the United States, and it forms the foundation of a program for adolescents that enable creating connections among contents from academic programs and daily life. A program of one weekly session whose first step is focusing the mind, keeping calm, observing the activity of the senses and thus allowing this activity to decrease, and maintaining attention on the present moment, establishes a state of concentration that increases reading capacity.

TOWARDS A CONCLUSION

Remaining a witness – observing mental contents, the thoughts, information, and all that smog of data about consumption that normally distract our attention from the present moment – allows us to direct attention and concentration in reading literacy. Think for a moment on the relation between your mind and that interrupted connectivity to your mobile devices, and how – I am not pretty sure but plausibly it is – we act as an instrument of our technological instruments. The capabilities for establishing equanimity of mind even in the river of distractions and information

of our lives, by attention and concentration is probably one of the very attractive states of mind that embraced with high attraction the thoughts and ideas of the poet and also an educator Rabindranath Tagore at *Santiniketan,* his School founded at the very beginning of twentieth Century. The impacts of discipline of mind and its relation with deep understanding of human nature were at the very heart of a curriculum in Tagore's School. In this experience a Mexican writer, philosopher and educator José Vasconcelos found a key starting point for an educational revolution in México by distributing all over the Contry some South Asian texts on philosophy and literature, among them, Tagore's oeuvre was a foundational (Martínez Ruiz, 2014). I am referring to Tagore's School and his applied educational model to include techniques for children and youth. He was a pioneer in education, genuine, sincere, and non profit educator; a good way to teach to many examples of current business on education that are using these techniques for monetary purposes and without deep understanding of education or the tradition over the last two decades.

Mexican Nobel Prize winner Octavio Paz (1996) knew the effects of states of conscious attention. At some point Buddhism influenced him, because of its simplicity and powerful way of understanding the most beautiful opposites of existence. In his oeuvre, Paz expresses in proper poetic style one of the benefits of *dhāraṇā*, the kernel for preparing the mind and body for conscious attention on words and their sound: "Fixity is always momentary…we ought to make our way back upstream against the current…and arrive back at the root, the original, primordial word for which all other are metaphors" (Paz, 1980, p. 20).

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JOANNA HIGGINS, RAEWYN EDEN AND AZRA MOEED

4. MINDFULNESS INTERVENTIONS IN CLASSROOM LEARNING ENVIRONMENTS

ABSTRACT

The potential benefits of mindfulness – the cultivation of non-judgmental awareness and attention to the present moment – is an emerging field of inquiry for psychology and education researchers. Findings from a growing body of studies suggest that undertaking mindfulness-based breathing for a short time each day can mediate the impact of emotions in classroom events. We focus on ways in which two teachers and their students and the researchers developed emerging understandings of mindfulness during a three-month breathing intervention. Drawing on video data of the teachers leading classroom breathing sessions and associated conversations with teachers as well as a training session, we highlight some of the challenges encountered as teachers introduced mindfulness-based breathing in classroom settings.

Keywords: mindfulness, classroom learning environment, breathing meditation, emotions

IMPORTANCE OF MINDFULNESS

Mindfulness – the cultivation of non-judgmental awareness and attention to the present moment – has its roots in Buddhist tradition and practice. Over the past few decades, practices promoting mindfulness have become secularized and have taken root in Western societies. More recently, mindfulness practice has attracted the interest of researchers in education where it is an emerging field of inquiry for psychology and education researchers. There is now a body of evidence that mindfulness practice can improve cognitive functioning and emotional awareness (e.g., Flook et al., 2010). In particular, studies suggest that a focus on mindful active deep breathing for a short time each day can mediate the impact of emotions in classroom events (e.g., Tobin et al., 2013). A related strand of research in an educational setting suggests that this mindfulness practice can also improve achievement (e.g., Joyce et al., 2010) although this research is more equivocal. To date there have been few studies connecting emotions to learning environments yet the emotional climate of classrooms is important to the teaching and learning of subjects such as mathematics. Recent policy developments in New Zealand are premised on the notion that wellbeing is vital for student success and schools are

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 59–72.

ethically, morally, and legally obliged to "consider, promote, balance and respond to all aspects of the student, including their physical, social, emotional, academic and spiritual needs" (ERO, 2013, p. 4). The importance of students' emotional and social wellbeing is implicitly recognized in the New Zealand Curriculum's stated vision (Ministry of Education, 2007) and promising research findings linking mindfulness in education with positive social, emotional, and academic benefits for students align with key competencies underpinning the curriculum (Mental Health Foundation of New Zealand, 2012).

Starting from the premise that teaching is emotional work (Ritchie et al., 2011), we explore the introduction of a mindfulness-based breathing intervention in two classrooms of 10- to 12-year-olds in a New Zealand primary (elementary) school as part of their mathematics lessons. We follow Tobin et al.'s (2013) stance that central characteristics of learning environments are perceived and enacted emotions that unfold moment-to-moment as part of the collective life of a classroom. By examining rituals associated with the enacted practice of the mindfulness breathing intervention we are interested in how and why these develop as a component of the classroom emotional climate. In this study, a focus on mindfulness in mathematics draws several strands of research together to explore the relationships among mindfulness practice, emotional awareness, and the learning environment of the mathematics classroom; a deliberate choice given the negative emotions often associated with mathematics learning. It also provides an opportunity to link to policy documents such as the curriculum and quality teaching indicators of students' wellbeing.

HOW WE WENT ABOUT IT

We are interested in teachers', students', and researchers' increased awareness of their emotional reactions to classroom events; the connection between a breathing intervention and mathematics teaching and learning; and the potential of a mindfulness intervention to improve the emotional climate of learning environments. Following Tobin (2012) we use narrative methods to "represent what happened that was considered most important and show how what happened interconnects central characters and events" (p. 120). We draw on emerging theoretical frameworks for understanding emotions with a focus on mindfulness practices in classrooms, and associated methodologies (Tobin et al., 2013). The sociocultural perspective employed assumes that structures expand the power to act for all participants, particularly where there is co-construction of knowledge about teaching and learning (Tobin & Roth, 2006). In this study, the agency of all participants is seen through an expanded set of practices in learning environments restructured through a daily breathing practice. The research question on which we focus is: How is a mindfulness-based breathing practice negotiated in mathematics classrooms?

For the study, a mindfulness-related breathing practice was used daily at the beginning of mathematics lessons and was modeled on that introduced to participants at a training day led by Len, an experienced mindfulness practitioner

and trainer. Taking a polyphonic approach that draws on multiple voices to allow different perspectives on the practice of mindfulness breathing as it emerges in two classrooms, we use multiple data sources. The differences amongst three groups of participants – the trainer, teachers, and researchers – are highlighted to provide a polysemic interpretation of how each group made sense of the practice. Following Powietrzynska, Tobin and Alexakos (2014), we propose that the breathing intervention acted as a reflexive object increasing awareness of mindfulness and the likelihood of participants talking about emotions and emotional awareness.

Five observations of mathematics lessons, including the breathing practice, were conducted in each classroom throughout the three-month intervention, starting with the teacher's initial introduction of the mindfulness-related breathing practice. The training day and observations were video-recorded. During the emerging breathing practice there was not only major building work at the school but there happened to be a number of emotionally-charged lifeworld events including Team New Zealand's participation in the final round of the America's Cup yachting race (similar to following the Superbowl in the US), a major wind and rainstorm, and two strong to severe earthquakes. The emerging practice might be viewed as contingent on these events to the extent that they not only formed part of the context, but also shaped both individual and collective understandings about mindfulness.

BECOMING MINDFUL

Our story traces different pathways of the various participants in the project to exploring and adopting mindfulness-based breathing practices. We are interested in what understandings were collectively generated across the groups. Insights from the training day, the classroom observations, and the conversations with participants are all useful sources of evidence of developing understandings of mindfulness for participants in the study. We take a polysemic approach using all participant stories including our own to make sense of the intervention as for us, like Tobin (2012), it "is important to retain different perspectives, ensuring that in addition to reporting patterns of coherence we also report and learn from contradictions" (p. 120). During the events that coincided with the intervention, such as the earthquakes and the America's Cup final, our attention to being responsive to the anticipated (the watching of the final) and the unexpected (shaking ground) was heightened. We see this as part of the contingent and emergent understandings of mindfulness as they unfolded over the duration of the intervention in these settings.

Wandering

For Len, our mindfulness practitioner, mindfulness is a way of being in the world; it is about "turning up for life." The breathing practice is a technique for "cultivating greater mindfulness that then starts to spill over and become just the way we operate." It is more than a simple relaxation exercise in that it involves each participant

intensively, actively, and non-judgmentally focusing attention on his or her mental state at each passing moment. It is about paying attention and being aware:

> Bring your attention to your breathing … being aware of each in breath and each out breath … not manipulating the breathing in any way but just allowing it to find its own natural rhythm … just resting with an awareness of breathing … not trying to achieve anything … not trying to push anything away but just resting.

An audio resource available via YouTube provided a structure for us to "go with … stay with" in our practice. Images of attention wandering, being pulled away and brought back, being anchored are central to this breathing practice led by Len: "every time your mind wanders just note it and say wandering and gently bring your attention back to your breathing." He identified improved emotional regulation for teachers and students, and associated reductions in negative emotions such as stress and anxiety, and increases in positive emotions such as self acceptance and calmness, as important outcomes of classroom-based mindfulness practices. For him, resting is a state achieved as an outcome of practicing mindfulness rather than a characteristic inherent in the practice itself. The state of resting is:

> a state where we still experience all the colors of our life … all of the full range of emotional experience that makes us human. But we're no longer rocked in the same way by it because underneath it all there's a kind of peaceful calmness that we can learn to rest in.

Len highlighted the reciprocal relationship between mindfulness and the emotional and social climate of classrooms, commenting on the importance of a positive class climate and respectful relationships to how open students are to his mindfulness work in schools. He suggested that it is the practice of mindfulness that connects students, teachers and researchers: "It's not a mindfulness intervention unless you are doing some mindfulness yourself." As leaders of the classroom intervention, teachers could then be guided by their personal practice as they responded to their students' experiences of mindfulness. Mindfulness practice is individual and personal and Len recommended leading the practice for each other as a way of being "in the flow of being able to lead it for the kids […] finding your own natural way of doing that." He emphasized the importance of realizing the essence of what a mindfulness practice is and leading it from that place, recognizing that the breathing intervention is a decontextualized practice removed from within a broader mindfulness context.

Perhaps anticipating the potential for skepticism among our group of teachers and researchers, our trainer showed us a TED talk chosen because the presenter was a neuro-scientist and once-skeptical practitioner of meditation. Her shift from skeptic to believing in the power of meditation to "change your brain" in the face of scientific evidence afforded the possibility of us making a similar shift in our thinking and appeared to be aimed at "selling" us an unorthodox practice.

Accordingly, our trainer asked teachers to consider how they would "sell" the breathing practice to their students. He appeared to be surprised when a teacher from the wider group suggested that he expected that the students would be open to the practice and seemed to read this as a sign of confidence in the group of teachers. In contrast to this, another teacher later appeared to use the mindful eating of chocolate to introduce and perhaps to "sell" the unorthodox practice of mindfulness-based breathing to his class.

No Slouchies

Using Len's YouTube clip the teachers' pathway into the breathing practice was focusing on physical aspects or posture, noted as important during the training day because "if we are to focus on our breathing we want it to be flowing well." As the clip began we were instructed to assume a posture that "supports sitting relaxed but alert at the same time" with our hands resting on our thighs or laps and our eyes open or closed as we felt comfortable. Specific physical elements such as sitting still, staying upright, and stretching were highlighted by both teachers and students. These comparatively familiar aspects of posture appeared to be chosen to facilitate what was for these teachers (and perhaps for their students) the introduction of an unorthodox component of a classroom math session. However, in exploring the teachers' emerging practice, despite similarities in their focus, we were struck by the different physical stances of the two teachers as they adopted and led the mindfulness-based breathing practice. This contrasting physicality between the teachers was contradictory in that the teacher with self-declared little interest in sports and fitness (Hugh) was more physical around the breathing practice than his more athletic colleague (Steve). Hugh had expressed his interest in drama and seemed to us to use the breathing intervention as a performance opportunity, much to the expressed delight of his students, while Steve took a more passive, measured approach. Both teachers explicitly emphasized posture in their initial introductions of the practice.

Introducing the breathing practice for the first time, Steve instructed the students to breathe normally. He noted, "you're not trying to breathe in any special way" and described in detail the posture he wanted them to assume: "sitting in an upright position, bum tucked into the back of the chair, hands resting on their quads, feet on the ground, relaxed back, soft tummy, in a comfortable position, eyes closed." With his chair positioned at the front of the room, Steve faithfully modelled the physical aspects of the posture he had described: his eyes were closed, his stance was upright, and his closed fists were resting on his thighs. From time to time there was giggling and audible yawning from students to which he made no obvious response.

Steve's attention to posture and stillness was highlighted in a conversation with two of the researchers. He was talking about no longer needing to use the audio clip to lead the practice: "They don't need to now. What they find hard is just

sitting up." He described how some students could not sit with their feet on the floor and others were too big for their desks and chairs. "Yeah, the posture thing's pretty big. We've tried all sorts. We've tried it lying down on the floor. We've tried sitting … anywhere. Usually we do a few stretching movements beforehand." A month later, Steve again raised the subject of posture. The breathing practice, he explained, "is routine now … they don't even think about it. We haven't had any troubles … except for the posture thing. They always try but it ends up after a few minutes being down." He mimed slouching down in a chair and reiterated his previous comments about a misfit between the classroom furniture and the students.

Taking a closer look at Hugh's emphasis on posture prior to the breathing sequence, he appeared to reinterpret Len's goal of "sitting relaxed but alert at the same time" as "no slouchies." He drew students' attention to posture to ensure the support of the seated body for the duration of the breathing, usually about 10 to 15 minutes of stillness. He talked with the students about sitting in their chairs with their eyes closed with the goal of trying to focus on their breathing and bringing attention back to breathing when they realized their mind was wandering, which he noted was "really difficult." He suggested that they move their chairs away from their desks so their legs were on the floor and alerted them to listen for what to do with their hands. He also warned the students that there was a section into the YouTube sequence that he described as "pretty quiet."

We draw on events that illuminate differences and contradictions across participants in the intervention rather than necessarily follow a chronological sequence. This stance aligns with Tobin and Ritchie's (2012) point that "event selection is analogous to using a zoom lens" (p. 118) as well as to our commitment as researchers to a polyphonic stance of multiple voices to generate complex accounts that preserve the contradictions of introducing an intervention in a classroom. Using Sewell's (2005) idea of events being catalysts for individual

and collective change we trace salient moments where ruptures occur in the social equilibrium of classroom life to which participants respond differently and structures appear to be transformed so that new forms of classroom culture emerge.

Can't Keep Still | Falling Asleep

The focus on the physical was striking for Hugh in particular immediately following the breathing exercise. The following episode took place immediately after one of the first breathing sessions. As Len's YouTube breathing sequence ended, Hugh opened with "pretty relaxing … I think … what are your thoughts?" His emphasis on feeling relaxed, however, was not initially picked up with a boy in the class responding, "I can't keep still." It seemed from Hugh's retort, "You can't keep still yeah" followed by a comment that he'd follow up on this later that a conversation about difficulties with being still was not the direction Hugh wanted to take the discussion. After a brief pause he redirected the conversation to thinking about their minds and their thoughts. The answer he was looking for was offered by a girl to whom Hugh responded, "you feel really relaxed so do I." He related how when doing the breathing for 20 minutes in silence on the training day he was "actually quite tired." He proposed that when his mind wandered his posture would also relax. Hugh seemingly playing to the audience (the class of students and the researchers), then dramatized how he nearly fell off his seat falling forward because he became so relaxed during the breathing. This provided a great moment of humor and burst of emotional energy within the class. Sitting on a chair facing the students he related: "And and I'd find myself after like 30 seconds or something of thinking about something I'd be like this," he leaned forward in his chair and paused while nearly bent over in two, "and then I'd be like wandering," he abruptly sat up straight in his chair.

There was much spontaneous synchronous mirth from the students while Hugh explained, laughing at the same time, "and then it was almost like I was falling asleep but … I wasn't I was just getting so relaxed I was kind of," he leaned forward then sat back upright, "drooping forward." He used this dramatization of what can happen when you get so relaxed through the breathing to inquire of the students how many figured out that their mind was wandering and brought it back to their breathing. He emphasized to those who had that it was "a big step that you're actually able to um realize that your mind was wandering." He then turned to consider the benefits to concentration and the conversation continued the theme of tired but more relaxed with Hugh using the analogy of the feeling of just having woken up accompanied by mimed stretching. At the end of this discussion the students were asking to do the mindful breathing again.

In contrast to the idea of a posture that "supports sitting relaxed but alert at the same time," being relaxed seemed to be picked up more by Hugh than the idea of being alert. Alongside the physical acts, his opening statement following the breathing of "pretty relaxing … what are your thoughts" seemed a bit contradictory. Perhaps this teacher was anticipating that the students would find sitting still the hardest aspect of the practice rather than that of refocusing their attention. He also may have been considering the preservation of classroom order during the introduction of an unorthodox practice that did not obviously align with the mathematics lesson it preceded.

We wondered about the extent to which traditional teacher-student power structures were disrupted by the new practice of mindfulness. Over the three-month duration of the intervention, both teachers led the mindfulness breathing from the front of the room and reiterated observable physical markers of participation such as stillness and eyes closed. By distancing himself from the power position, Steve appeared to take a contradictory stance to being-in/with the students as the practice became routinized yet he did not negotiate with students over the duration of the breathing. Hugh, while appearing to negotiate the practice by discussing with students the duration of the intervention and whether the lights should be on or off, appropriated the finale of the breathing practice by leading a vigorous exercise routine. His habitus-generated practice of humorous dramatization appeared to build camaraderie with his students with the humor providing a structure for him to be-in/with the students and they with him while learning this new practice of mindfulness breathing together; a process of enculturation (Roth & Tobin, 2002).

Scooby

Immediately following the breathing exercise, Hugh extended a physical sequence that he had previously used to transition between a literacy and math session. He built a connection between the breathing and physical stretching by incorporating breathing in and out. Although Len had introduced stretches following the breathing exercise, Hugh embraced and embellished these to create a performance he called "Scooby." A few weeks into the breathing, Hugh showed his students some of the stretches that were led by Len at our training day. He demonstrated as he instructed:

> They're a little bit tricky but everyone stand up and now I just need to remember how it goes. It's like you're scooping something up like scooping some soil up or something so scooping it up and then backs of your hands are together then as you come up to the top … they turn around then come back down to do the scooping again.

He commented to the students that it "feels good after you've been sitting for about ten to fifteen minutes." The students giggled. He went on to talk with them about synchronizing the breaths in and out with the arm movements:

> We should probably incorporate this into dance (laughing) butterfly swim … there was something about breathing as well wasn't there? Was it you breathe out on the down and in on the up? Try to incorporate that in too so in in breath on the up … one more … oh yeah and there was this one aye … awesome.

A few weeks later, Hugh continued to work on synchronizing the in and out breaths with the scooping up and down movements. He demonstrated as he instructed the students: "Scooby […] Scooby so it's reaching down and d-o-w-n and breathing in when we're going down I think it is … arms out … so is it breathing [out]?" Several students could be heard saying "no it's breathing in," and Hugh continued, "the thing is when we're going down we're kinda compacting this area so do you remember if it's breathing in or out when we're going down … I'm pretty sure it is breathing in when we're coming up yep." As the stretching continued there was the sound of breathing in and out as arms were scooped up and down. Everyone was in synch with their movements. This lasted for 10 minutes until Hugh brought

it to a close with "Scooby scooby … and this time reaching up as high as you can try and touch the roof." He continued with accentuated breathing sounds, "and a bit of a uber uber uber." There was lots of laughter at this sound led by Hugh, but most appeared to join in. All of them finished the sequence off by shaking their shoulders. This was in marked contrast with Steve's largely unmarked transition to the math session: "OK guys just stop there and take a big breath in … stretch your arms out above you … and without talking I want you to come down and sit on the mat."

It was apparent that Hugh and Steve experienced the mindfulness practice as contradictions to their teacher role as evidenced, for example, in the different transitions from the breathing practice to a math lesson. The way each teacher produced this transition appeared to both characterize and serve to reestablish the known classroom environment and the teacher's role in it. While both teachers appeared to take a stance that focused on classroom order established and maintained through the creation and reproduction of explicit and implicit norms and routines, there were also contradictions in the stance adopted by each teacher. As a recent graduate and novice teacher in his first year of professional practice we see Steve's heightened attention to ensuring no disruption to classroom orderliness as supporting the establishment of a teacher role that positions him as "in charge" in the classroom. In contrast to this was Hugh's playful orientation to order – appearing to play with it, but on his terms – ensuring his voice and energy drive the unfolding performances to position the students as participating audience. Of particular note in this case is that the transition between the mindfulness breathing and the math lesson could be characterized as unmindful. There appears to be a disconnection between the intended purpose of the supplementary stretching activities as presented by Len on the training day and Hugh's enactment of these in the classroom setting. The intended purpose of the stretching activities was oriented towards mindfulness. In contrast the apparent goal of Hugh's "Scooby" performance after the individualized breathing practice was to reestablish the classroom collective and his position in it. While we are zooming in on these specific contradictions to generate meaning we are at that same time acknowledging that contradictions are ever-present and we are looking for thin coherence.

RIPPLING OUT EFFECT

Through putting mindfulness on the agenda we, as researchers, connected with different aspects of our lifeworlds that we see as the "rippling out" effect of the intervention. Our first impressions of the possibilities of mindfulness breathing started with our experience on the training day with Len. We recognized the unique context in which it was introduced to us with the session tailored to our purpose of introducing a mindful breathing intervention in classrooms. We reflected on the low-key accessible way in which the training day unfolded providing lots of choice and individual autonomy to get us started on the practice. We saw the introductory training as a gateway to multiple pathways in which we could develop our own

mindfulness breathing practice as a valuable strategy for our toolkit for managing life events. We felt at the conclusion of the day that Len had given us the option to make it part of "our way of being." In contrast to a training approach focused on frontloading the practice, we saw the possibilities of developing our understanding of the practice as an emergent and contingent event as the intervention unfolded in the classrooms.

What struck us as we observed and participated in the practice with the teachers and students was the contrast between each teacher; differences we have continued to puzzle over. Neither teacher appeared to be worried by our presence in their classrooms, although Raewyn recalled Steve's comment, when putting an oximeter on his wrist that, "my heart rate's 95 so that probably says I'm slightly nervy … but I'm getting videotaped today." Perhaps both being younger male teachers in the early stages of their careers, they wanted to appear calm in leading the breathing with their classes. We noticed differences in the activities that wrapped around the mindful breathing that appeared to us to reflect each teacher's way of being or habitus. We wondered what impact this had on classroom events. Hugh sandwiched the mindfulness breathing between two lively sessions – one immediately before being literacy-based and the other a limbering-up after sitting still for the breathing. The students appeared to have no overt reaction to the breathing practice, perhaps anticipating that the quiet still time at their desks would be sandwiched between lively sessions as that having a lively, quiet, lively sequence of events was Hugh's and his students' rhythm of classroom life. A contradiction was that the students appeared emotionally content, and Hugh appeared to connect with them on this level, yet after their "Scooby" limbering up following the mindfulness breathing they took longer to settle than Steve's class. Steve appeared more worried about the unorthodox event perhaps in terms of anticipating an emotional response from the students that he would need to control, however, we did not observe this eventuating. We noticed that he first introduced mindfulness breathing through chocolate eating that we felt perhaps was to distract attention from the unorthodoxy of the practice and perhaps to get student buy-in – as teachers we wondered whether we might have done the same. Whether it helped or not, the students in Steve's class did not appear phased in participating in the new practice. We remember and feel from our own time as teachers the urgency to maintain classroom order, particularly in non-routine situations, and drawing on these experiences as teachers related to the teachers' attention to establishing and monitoring stillness and quiet during the breathing exercise. We concluded that our understandings as researchers of the teachers' attention to the physical structures of mindfulness breathing drew on our collective experiences, past and present, of managing classroom learning environments.

From a lifeworld perspective we become aware of the power of mindfulness breathing as a heuristic for connecting to other parts of life. We reflected on the limited input (day training and our observation/participation of the practice in classrooms) yet profound and pervasive impact this had had on all of us individually.

For instance we each began to practice mindfulness breathing when we had trouble getting to sleep; Azra used it when stuck in traffic as "a good way to help oneself"; Raewyn found herself when talking over problems with others using the ideas to prompt new thinking about managing life as an unfolding process while questioning traditional strategies such as goal setting. Azra reflected on her teacher education students' feedback of her teaching as "you teach us how to reflect." Her strategy emerged while she was engaged in the mindfulness project as she realized that some of these students had not necessarily previously encountered reflection in their degree courses. Joanna thought about the ideas in managing conflicting work demands and also when travelling long-distance by planes with the inevitable delays and crowded economy seating. As we have continued to collaborate as researchers and scholars we have attended to a greater extent to the socio-emotional dynamic of our work. Our shared consciousness of mindfulness has impacted what we pay attention to, as we go about our work together and as we work with others.

We each made connections to previous life experiences from Azra's visit to Sarnath, a Buddhist temple near Varanasi, nearly 50 years ago when she remembers being struck by people sitting still and silent, to Joanna's solo yachting from a young age and her sense of oneness with nature and her more recent experiences being as one with birds, tuning in to their birdsong. We are left wondering is it more than a tool; is mindfulness breathing perhaps a way into an encompassing framework? We agree and have experienced it as a useful tool to calm oneself, but we are also aware that we are all more in tune with our emotional reactions to life events and have a raised consciousness of mindful breathing in conversations with others and more generally in the media. This might be explained as our use of mindfulness-related breathing as a reflexive object heightening our awareness so we notice mindfulness in everyday events such as in social conversations and the media. We became more aware of heightened emotional responses in teaching situations and events such as earthquakes and America Cup races. We realize that we had buy in from the training day and that mindfulness breathing as a practice goes way beyond the traditional advice suggested in adverse situations of "breathe deeply" or "don't forget to breathe." Perhaps significant is that we came to the practice of mindfulness breathing in a neutral situation.

By having mindfulness fore-fronted we wove it into our conversations and everyday lives. So for us mindfulness has had a ripple effect out to all aspects of our lives. Interestingly we did not set out to deliberately practice mindfulness; it was more like it crept up on us. We are each still on our journey of establishing it as a way of being – as Len had described it: "cultivating greater mindfulness that then starts to spill over and become just the way we operate," but this is its power; to have each of us in its grip as something that stays with us as researchers and we hope that this is the same for the students and the teachers. Although we do not have evidence to support wider claims about the impacts of mindfulness, we believe this study was a transformative opportunity to explore ways to forefront the importance of the emotional environment in classrooms.

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SONAM DAKER, JAMBAY LHAMO AND SONAM RINCHEN

5. MEDITATION

A Jewel for Reflective Teaching

ABSTRACT

Chogyam Trungpa (Rinpoche) in his book *The Myth of Freedom and the Way of Meditation* states,

> Meditation practice is not a matter of trying to produce a hypnotic state of mind or create a sense of restlessness … Instead meditation should reflect a mentality of richness in the sense of using everything that occurs in the state of mind. (1976, p. 63)

In this chapter we discuss in the form of personal journal entry, how our (the authors') regular practice of sitting meditation mediates personal as well as professional activities. We initiated 3–5 minutes of sitting meditation before the start of the lesson and recorded the influence the practice of meditation had on the classroom teaching and learning keeping regular personal anecdotal journaling. The journals augment our ability to be wholly "present" to what is happening in the moment; recognize teachable moments and bring joy, creativity and vibrancy in the classroom. The journals also report that the practice of meditation can open oneself to opportunities for increased clarity, relaxation and insights, which lead to profound engagement with our colleagues and students. Thus, our main focus in this chapter is daily practice of sitting meditation and recording its impact on one's daily activities, particularly in relation to classroom teaching and learning.

In this chapter we also include a section on interviews carried out to capture the thoughts and views of some teacher educators and student-teachers who practice sitting meditation. In that context the key concepts we feature are cultivation of awareness, being in the present moment, loving kindness, deep listening, and mindful action and speech.

Keywords: sitting meditation, self-awareness, loving kindness, mindfulness

THE BUDDING OF A NEW ERA

Bhutan, known as the Kingdom of Bhutan, is a landlocked country in South Asia. It is bordered to the north by China and to the south, east and west by India.

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 73–88.

It has an area of 38,394 sq. km and a population of 733,005 (Royal Government of Bhutan, 2013).

The modern education system in Bhutan started in the early 1960s with the launch of the country's first five-year socio-economic development plan. Initially the education system was based on the Indian education system, and even the teachers were hired from India. Later, the government realized that if Bhutan had a national curriculum handled by Bhutanese teachers, the students would experience a difference in their education. Thus in pursuit of Bhutanizing the education system, a first Primary Teacher Training Institute was set up in Samtse in 1968 under the direct command of the Third King of Bhutan. However, the Institute could not meet the demand for teachers in the field. So in November 1975 another Primary Teacher Training Center to prepare teachers for lower primary education was established in Paro. Since then both institutes expanded first to National Institute of Education, and then to the College of Education. Today, both Colleges offer the degree of Bachelor of Education for Primary and Secondary Education, and many of the faculty practice meditation at the start of their lessons.

Meditation is not a new term for Bhutanese; however until recent times it had a very religious connotation whereby one that meditates is normally one who seriously practices religion – like the monks or the nuns; and goes to the monastery or resides in a small retreat center especially built for meditation purposes. Breath-watching, sitting meditation began to be introduced in schools throughout the country as an aftermath of a series of workshops conducted to promote the values and principles of Gross National Happiness in the schools. One such workshop was held in December 2009, where the school principals from across Bhutan attended a meditation course to aid educators in inculcating Gross National Happiness at both personal and institutional levels through cultivating mindfulness. Since then, students of all ages have been undertaking similar meditation at the start of each school day (Phuntsho, 2010).

In this chapter we document the impact of meditation on our personal as well as professional activities.

MEDITATION AND ITS EFFECTS ON PERSONAL AND PROFESSIONAL LIVES

To give a perspective of student-teachers and teacher educators on meditation and its effects on their personal and professional lives, we interviewed two teacher educators and four student-teachers. They were purposefully selected as they have some awareness of meditation and it has impacted them personally and professionally. They were asked to respond to specific questions during one of their free periods in the spring semester. The questions include: What is meditation? Did meditation bring change in your life professionally and personally? Are there any drawbacks of meditation? The interview questions are appended (see Appendix A).

WHAT IS MEDITATION?

To give a perspective of student-teachers and teacher educators on meditation, we interviewed two teacher educators and four student-teachers. They were purposefully selected as they have some awareness of meditation and it has impacted them personally and professionally. Most of the respondents posit that meditation is all about working with mind so that they can concentrate or focus on their work. For instance, Pema asserts, "meditation is a process of working with one's body and mind or synchronizing the body and mind in any given space and time" (Personal Interview). Pema (pseudonym) is a senior lecturer at one of the Colleges of Education, Royal University of Bhutan. He has over 15 years of experience teaching counseling, English and other professional modules to B.Ed and M.Ed students. He is a trained counselor and has resourced numerous workshops on counseling education and mindfulness. Pema's views are echoed by Dorji who says, "Meditation simply means focusing on one thing so that our mind does not get diverted. It is also defined as disciplining our mind by contemplating on one particular thing or person" (Personal Interview). Dorji is in his final year of B.Ed, a four-year program focusing on primary education. He was introduced to meditation by the first author (Sonam Daker), who taught one of the modules to Dorji's class in the last semester. For the entire semester she conducted five minutes of meditation with the students prior to the class session. For Karsang, who belongs to the same cohort, meditation is the complete understanding of oneself realizing that everything around us is impermanent and that practicing mindfulness motivates one to be compassionate, patient, and empathetic to others.

The following section briefly discusses Shamatha meditation, which was mainly practiced by the authors of this chapter.

Shamatha Meditation

Shamatha meditation is a sitting meditation that focuses on making the mind more stable and useful. The word Shamatha is derived from Sanskrit (Tib.:shi-ne) and means peacefully abiding; peacefully abiding describes the mind as it naturally is (Mipham, 2002). In this meditation, the object of focus is the breath. The important characteristic of Shamatha meditation is to let go of any goal, sit straight, and watch the breath as it goes in and out (Khyentse, 2012). Sakyong Mipham (2002) discusses how to engage in Shamatha meditation:

> As you focus on the breath, you'll notice that various thoughts and emotions arise. When this happens, acknowledge that you are thinking and return your focus to the breath. In focusing you are bringing yourself back to attention. You are centering yourself in your mind and placing that mind on the breath. (p. 9)

And Pema Chödrön (2012) sums it all with this beautiful quote, "The technique of sitting meditation called shamatha-vipashyana (tranquility-insight) is like a golden key that helps us to know ourselves" (p. 8).

MEDITATION AND ITS BENEFITS

In support of meditation, Dale Wright (2009) says that meditation opens a space of receptivity within our attuned mind to what is going on around us at the very moment. The words of Wright were echoed by Rajesh, student-teacher from the final B.Ed primary cohort who says, "Though the worries and stress that I experience sometimes cannot be eradicated, meditation gives me strength to adapt to it and live in the world of stress" (Personal Interview).

Meditation is learning how to go within yourself, to make your mind calm and clear, free from agitation, desire and confusion. It is an important form of self-control and healthy practice. It augments focus and attention and could be used to enhance empathy and all intentional capacities. According to the Twelfth Tai Situpa (1992) the development of inner knowledge is done most effectively through the means of meditation. He further states that even though the inner essence of everyone is perfect, external conditions and manifestations of perfections are often lacking and "Meditation practice makes it possible to gradually overcome the imperfect conditions and liberate the inner quality of perfection" (p. 134).

Similarly Richard Brown (2011) notes that meditative ability to notice when our attention has strayed and to gracefully and readily come back to the matters of the present moment are very useful while teaching. He further states:

> Just as in meditation, when we notice we have lost our awareness of our thoughts while teaching, we could non-judgmentally take a breath or two and resume mindfully. Mindfulness of our thoughts promotes a more creative inner dialog … Even when we are teaching the same old material, we can be more present with it, rather than mindlessly rummaging through the same old thoughts. (p. 79)

Wright (2009) contends that meditation makes clear to us the influence of body on the mind and the important role mind plays in our physical lives. So, when the integration of the mind and body is cultivated through meditation there is heightened experience of both. And that results in the "process of nurturing certain desirable mental qualities such as friendliness, compassion and equanimity" (p. 117). Meditation is a widely used and increasingly popular intervention that positively affects the individual at cognitive, physical, emotional, behavioral, and spiritual levels. The practice of meditation has been shown to reduce systems of stress and improve overall well-being. Furthermore Wright states that mindfulness meditation enhances interpersonal sensitivity, more adaptive coping strategies, and self-compassion.

Pema shares the benefit that he reaped by practising sitting meditation for the last five years:

> Meditation has helped me to enhance my well-being, increase concentration, raise my mindfulness awareness level (i.e., in terms of body, speech and mind). It has enhanced my professional skills such as empathy and compassion at all levels of my life and experience. Furthermore, it has promoted a better intra and inter-personal relationships with individuals and in the immediate environment. It has changed my life style and the way that I look at the world. This practice is very profound indeed. (Personal Interview)

Mindfulness practices have been shown to help teachers reduce their stress levels, assist with behavior management strategies and improve self-esteem. It also heightens their awareness of the teaching habits and allows them to empower students to trust their own intuition when approaching academic work.

LOVING KINDNESS

Loving kindness is the wish that all beings be happy. Obviously, extending that wish to all beings is far more challenging, but that is what loving kindness is ultimately about (Wegela, 2009).

The practice of loving kindness normally involves:

1. Recollect a moment of happiness or well-being, the place and people of this event from your life. Then try to renew this feeling in your heart letting it fill you completely. Then say or think: "May I be happy, may I be healthy, may I live with ease."
2. Then, begin to extend these wishes out to one other person or being. One can recollect a positive relationship with a person or animal who is close and dear. Visualize his/her face or remember a situation in which you were together. Let this energy of loving kindness fill you and then send this love to the image in front of you. Think or say: "May you be happy, may you be healthy, may you live with ease."
3. Then continue to extend these wishes to someone with whom you have neither a strong positive or negative feeling – a "neutral" person. Send the flow of loving kindness energy from your heart to the heart of this neutral person. Think or say: "May you be happy, may you be healthy, may you live with ease."
4. Finally, you can include those with whom you have a difficult relationship or negative feelings. Send the flow of loving kindness energy from your heart to the heart of this difficult person. Think or say: "May you be happy, may you be healthy, may you live with ease."

Loving Kindness Meditation

This section summarizes the practice of loving kindness and also details the authors' experience of applying the loving kindness in different situations.

According to Chödrön (2001), compassion is the process of trusting the basic goodness of what we have and who we are, and developing a true understanding of other people as well. It is born out of loving kindness. When cultivating compassion, we learn to relate to ourselves with tenderness and unconditional acceptance, viewing every thought, feeling, and experiencing as a new opportunity to awaken. Over time, this attitude will naturally begin to radiate outward, allowing us to expand the scope of our compassion to include all beings. Karen Wegela (2009) also points out that for meditation practitioners, loving kindness is an outcome of our practice. She confirms that sitting and practicing moment by moment the simple discipline of being with whatever arises, letting it be, and letting go, naturally uncovers loving kindness. She further states that loving kindness practice also helps us cultivate both the wish for others to be happy and also the warm and gentle quality of loving kindness toward ourselves.

The second author (Lhamo) shares how loving kindness meditation helped her cultivate compassion through empathy. Her personal experience confirms how loving kindness meditation nurtures connection with students through empathy. The extract from her journal entry reads:

> Today, I had a difficult conversation with a disruptive student in the classroom. I noticed how I tended to condemn him. I tried tuning into what was happening inside me. I experienced a knot in my stomach and heaviness in the chest. I did not feel like talking to him. I paused and sent loving kindness to myself as well as to the students and that helped me open my heart to listen to his story with empathy. By relating to him in an openhearted way, I was able to tune into his inner world to respond wisely and skillfully. (Lhamo, Personal Journal, April 8, 2013)

She further reports:

> Loving kindness meditation has helped me to engage in compassionate listening. I have observed that faculty meetings and workshops usually experience conflicts that sometimes drain energy and dilute outcomes. However, I have noted that when I engage in compassionate listening, it allows me to relax and breathe in difficult conversations with colleagues. As a result, it transforms the energy of conflict into opportunities to think more clearly. This helps to promote the capacity to connect with inner self and others, which fosters collegial dialogue. Listening compassionately encourages my colleagues to share their perspectives with so much of delight. (Lhamo, Personal Journal, April 15, 2013)

In the same context in Bhutan, the first day of the 12th month of the lunar calendar is the "Traditional day of offering" – a day which is celebrated as the first New Year especially by the people of Eastern Bhutan. Thus, it is also an official holiday with the government offices and the educational institutions closed to mark the day. Family, friends and relatives go out on a picnic or gather for special meals.

People also play traditional games like archery, khuru (a Bhutanese traditional game resembling darts), and degor (traditional game where two teams of 5–6 members each throw flat stones to a small wooden target buried in the ground). There is lot of merry making and rejoicing all through the day, and the atmosphere is one of joyous frivolity and lightness with neurotic playful energy in work. The highlight of the event is serving of alcohol and beverages to both young and old as a part of the event. There are also incidents of people going to parties, staying up too late, and getting drunk.

Thus, sometimes towards the evening one can come across some very aggressive drunken drivers or people on the road. And the incident below is one such example as shared by first author (Daker):

> It was about 6:30 PM and I was driving back from my aunt's place when suddenly a man walking along the footpath crosses the road without indicating that he wanted to cross the road. With a loud screeching of my brakes I managed to stop my car just a foot away from him. The man was least aware of what he has just done and just walked on and disappeared in the corner. My heart was beating very loudly and I felt tremors through my body. I quickly pulled across and took a deep breath and sat in my car for a few minutes applying my loving kindness. Had this been in the past I would have chased after the man and to give him a piece of my mind or immediately reported to the police to action against this person. But this time I managed not to give in to "fondness of being pulled by the situation." And as I recorded this incident in my journal I thought it was a wonderful transformation! (Daker, Personal Journal, January 31, 2014)

Jack Kornfield (2008) notes that loving kindness is first practiced towards oneself, since we often have difficulty loving others without loving ourselves. The personal experience shared by Lhamo, below is consistent with Kornfield's insights:

> I have noticed that loving kindness meditation helps to develop a loving acceptance of myself especially in the difficult situations. For example, recently I have been engaged in teaching a big group of students and the workload that I had to take was enormous. I was stressed most of the time at the end of the day. During those times, I made sure that I spend more time on loving kindness meditation and that seemed to help me become gentle on myself. And I have also noticed that I was being very compassionate with my students when they had difficulties in learning as I was able to empathize with their difficulties. (Lhamo, Personal Journal, January 6, 2014)

Loving kindness meditation predisposes to recognize the basic goodness of our students and appreciate them with fresh perspectives. In this way, it discourages being judgmental; instead it facilitates an open and receptive mind that fosters loving acceptance. Practicing loving kindness encourages looking tenderly at thoughts and emotions with attention and awareness. Furthermore, it helps to

cultivate compassion and nurtures connection with students through empathy. For instance, Lhamo shares the following experiences:

> In the past, I had the habits of labeling students as late comers, bullies, dominant characters and so on. These labels did not allow me to become receptive to my students' responses as I always tended to be judgmental and condemning them with my prejudices. In this way I had the difficulty of connecting to my students at the heart level. Now, the loving kindness meditation is helping me focus on their basic goodness and that helps me develop the quality of loving acceptance. I look at them with fresh perspectives and in tenderness and that allows me to accept them with respect, compassion, and sensitivity for who they are. I am beginning to understand how my old habituated negative pattern of mind is changing in creating the whole different classroom atmosphere for my students. (Lhamo, Personal Journal, March 7, 2014)

The following excerpt from Daker's journal echoes Lhamo's experiences:

> Today, when one of my students struggled for words and expression to elaborate a concept, I felt heavy on my chest and a lump in my throat. I immediately practiced my loving kindness on him to be able to overcome this difficult situation. In the past, when I saw students take time to respond after they volunteered to respond, I usually interrupted and provided them the answer to fill up this long wait time and to move on to the next discussion. But this time I didn't. I was able to recognize in his face this strong enthusiasm to try for the response so I patiently waited for his response. And after much struggle, when he was able to give a satisfactory response, my eye muscles loosened and twinkled in a satisfying gleam. After the lesson, as I walked back to my office, I thought meditation does help one relate more fully and honestly to the learning environment and ourselves. (Daker, Personal Journal, February 28, 2014)

Pema, one of the teacher educators started meditating in 2009. Today, after 4 years of meditation, he feels that he has grown personally and professionally. For instance, he expressed that professionally:

> Meditation has helped me to enhance my well-being, increase concentration, raised my mindfulness awareness level in terms of my body, speech and mind. It has also enhanced my professional skills such as empathy and compassion at all levels of my life and experience. Meditation has also helped me to change my perceptions about life and work. (Personal Interview)

While personal growth includes:

> It has promoted a better intra and inter-personal relationship with individuals and in the immediate environment. It has changed my life style and the way

> that I look at the world. This practice is very profound indeed. (Personal Interview)

In support of the above views Karsang, one of the student respondents asserts:

> Before, I was egoistic in things I did and unconsciously acted rude to others which created chaos and problems. However, after meditating, I developed a concept of emptiness/impermanence deep inside telling me everything is temporary and that how you behave is crucial. I started thinking positively. (Personal Interview)

MEDITATION AND CLASSROOM TEACHING AND LEARNING

In this section we exemplify experiences other than the practice of loving kindness. According to Brown (2011) the meditative posture itself suggests that being mindful of our body, uncommon in academic teaching, can aid in transition … But just as in meditation, when our physical bodies are upright, receptive, and present, we are more able to directly contact our inner resources and be more responsive to our students. Ken Wilber (1996) notes, "As meditation progresses… embedded-unconscious is jarred loose from its unconscious identification with the self, and thus tends to either emerge as an object of awareness or at least lose its hold on awareness" (p. 113). In the same connection Susan Burggraf and Peter Grossenbacher (2007) contend that sitting in silence for a few minutes "cultivates awareness of one's own experience as it unfolds from moment to moment… and fosters an attitude of equanimity towards all that occurs including thoughts, emotions, memories, plans, bodily sensations, sound, and other perceptions" (p. 2).

We practice Shamatha meditation in the classroom briefly for a period ranging from 3 to 5 minutes before the teaching/learning session begins. Figure 1 shows Lhamo practicing meditation with her students.

Sometimes, we also take our students outside to practice sitting and walking meditation in the open (see Figure 2). Most of the students seem to enjoy this brief mindfulness moment in the wilderness. We have received many positive comments from the students. For example, some of the positive feedback the second author received from her students include: "I am able to control my wandering mind"; "I remain aware with my breath"; "I experience peace in my mind"; "it prepares me to become attentive in the class"; "I like the silence"; and "it relaxes me," etc. I am encouraged to know that the brief sitting meditation is bringing positive experiences in the lives of my students.

Burggraf and Grossenbacher (2007) further contend that the experience of using contemplative methods like meditation for a few minutes at the beginning of the class for students to sit in silence would result in "deeper and enhanced engagement with academic material, compassionate engagement with social issues, and greater open-mindedness and creativity" (p. 3).

Figure 1. Lhamo (second author) and her students in a meditation pose

Figure 2. The students practicing meditation in the open area

Daker recollects that since she started the 5-minute sitting meditation before the start of the lesson, she began to sense her students enriching engagement with the materials that she used in the class even if it didn't directly relate to the content of the lesson. In the class, after the usual 5 minutes of sitting meditation, before starting the actual topic for the lesson, she normally introduces "a thought for the day." She flashes the statement on the slide and lets students copy it in their notebook. Next follows a choral reading; first as a whole class, then the table groups, followed by just the boys or the girls and then they conclude with the whole class reading it together. Whenever applicable she also asks her students to share their opinions on the "thought of the day" statement. Here is an excerpt from one such lesson:

> Today the thought for the day was "Do one act of kindness each day of the year and change 365 lives" by Anthony Douglas William. After the usual choral reading, I asked the students to share what they think of the statement. Many of them shared the importance of being kind, some shared the little act of kindness that they did during the week. One of them suggested that we should keep a chart that says "My good deed of the day" in one corner of the class wall. The class members could then write their act of kindness that they do on any particular day on a post it note and paste it on the chart. As I heard this, I felt my heart open, I thought it was a wonderful idea as this would give opportunity to all the class members to see the act of kindness practiced by their friends and also emphasizes the importance of being compassionate and kind. (Daker, Personal Journal, April 24, 2014)

Another vignette:

> This morning after our usual 5-minute sitting, I asked my students to share their experiences of sitting meditation. A boy student said, "The meditation helps me to pay attention in the lesson, and I am able to focus better." Another boy said, "I feel calm tranquil after the meditation." "I feel that it is helping me concentrate on things," said a girl student. Another boy student said that he feels that it prepares him for the coming lesson and also keeps him awake. I was very happy to hear most of them say that it was helping them to concentrate and focus in the lesson. I was glad to note that meditation was having a very profound impact on my students. (Daker, Personal Journal, March 12, 2014)

A student respondent echoed the above views, noting that meditation helps teachers and students to reduce stress by keeping their minds calm. For example, Zangpo, a B.Ed primary student-teacher, who belongs to the same cohort as Dorji and Karsang asserts, "Meditation improves students' and teachers' concentration in learning and teaching. It also frees students from stress during tests and examinations. Students can focus on what they are doing" (Personal Interviews).

Joseph Goldstein and Jack Kornfield (1987) state that practice of meditation has to do with opening, balancing, exploring and investigating what is hidden in

us. We practice to "open, to balance, and explore" (p. 15). Along the same lines, Wright (2009) contends that meditation makes it clear to us the influence of body on the mind and the important role mind plays in our physical lives. So when the integration of the mind and body is cultivated through meditation there is heightened experience of both. Wright further states that meditation results in the "process of nurturing certain desirable mental qualities such as friendliness, compassion and equanimity" (p. 117). John Wellwood (1992) also contends, "When someone opens completely to what they are experiencing, the personality – which is an activity of judgment, control, and resistance – disappears for a moment (p. 103).

Lhamo shares:

> Recently, I have been working with a student who has a behavioral problem in the class. I heard about his disruptive behavior from a teacher who taught him last semester. When I sat with him to discuss over an important matter, the first thought that came to me was, "He is a problematic student!" I became judgmental the moment I saw him and that thought did not allow me to look at him closely. At that moment, I took a long breath, paused and let go that thought gently. I then started my conversation with him. I noticed that when the conversation takes place in freshness, it becomes easier for me to open to his thoughts and views. My mind becomes more spacious and I am more likely to see and hear his views. I also noticed that compassion and loving kindness pour out from my heart to him unconditionally. They help to soften the situation and deepen the connection and communication. (Lhamo, Personal Journal, 15th January 2014)

Venerable H. Gunaratana Mahathera (1991) also notes that meditation teaches us how to scrutinize our own perceptual process with great precision. We learn to watch the arising of thoughts and perception with a feeling of serene detachment and we learn to watch – to view our reactions to stimuli with calm and clarity.

Daker and Lhamo share their ability to be able to view reactions to stimuli with calm and clarity in the following vignettes:

> This morning I was to make my 3rd year B.Ed students sing the "6+1 trait of writing song." The tunes of the song were that of some nursery rhymes, with which my students were not familiar. So I had downloaded the tune the previous day to make them listen for a couple of times before actually singing the writing trait song. Once in the class, after our usual 5-minute sitting and the choral reading of the thought for the day, I asked my students to get ready with the scripts of the writing trait songs. I played the tune of the first trait; my students listened to it three times and then I asked them to use the rhyme tune to sing the trait song. They sang appropriately in a very jovial mood. Then I played the next two tunes; made the students listen and sing the song. It also came out beautifully. However, unfortunately the 4th trait rhyme didn't work. No matter how much I tried, the tune refused to play. In the past,

> when something like this happens in the class, I would be quite flustered and irritated. But this time I was very calm about the whole situation. I very mindfully apologized for the situation and asked them to sing the song of the tune we have learned and informed them that I would bring the rest of the three tunes in the next lesson. (Daker, Personal Journal, April 25, 2014)

Jambay reflects:

> I stood near the classroom door for a few seconds noticing my thoughts and emotions. I was little disturbed by the earlier conservation I had with one of my colleagues. I could still feel the constriction on the chest. I looked around, took a long breath and let go of those thoughts gently. Then I entered the class with fresh perspectives. As the students stood up to greet me, I looked at them with compassion and generosity, feeling the space of the classroom. I experienced a powerful force of connection with my students. (Lhamo, Personal Journal, September 5, 2013)

These few experiences augment the importance of introducing contemplative practice like meditation in the schools. And as mentioned by Robert Thurman (2011), we must encourage the establishment of contemplative centers in campuses and encourage departments to introduce "contemplative experience and expertise in whatever tradition as recognized and rewarded accomplishment in the professor and the students" (p. 21).

MEDITATION MAKES A DIFFERENCE

In this chapter we presented personal experiences mostly recorded through journal entries. In so doing we cultivate profound mindful practices gained through the practice of sitting meditation on a regular basis. In conclusion, we would like to say that the practice of sitting meditation and learning how to experience emotions directly taught us to notice how our students respond to the classroom dynamics and tailor our pedagogy to meet the students' needs in the moment.

We discovered that Shamatha meditation helps to train the mind to become more stable and clear. We have begun to understand the restless nature of mind. However, we have also noticed that as long as the mind is focused and there is a sense of awareness, it makes mind more stable and clear. In the past when we were in the classroom, we used to get carried away by what we were doing especially when we were lecturing a new concept and went on and on without being aware of our present moment. However, since we started meditating, we now are more aware of what and how we are doing in the midst of our teaching. We are very much in the present moment and it enriches our classroom practice.

As we have immensely benefitted from the practice of sitting meditation, we hope that this chapter will motivate interested individuals to practice sitting meditation on a regular basis.

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APPENDIX A

Dear Sir/Madam…

We would appreciate if you could kindly respond to the following questions. We assure you that the information will remain confidential.

Gender: _____
Student/Lecturer: _____

In your opinion what is meditation?
When did you start meditating?
Who introduced you into meditation?
What is your frequency and length of meditation in a day?
How and where do you meditate?
Did meditation bring any change (s) in your life. Yes/No. Please elaborate.
Professional growth
Personal growth
Do you think meditation should be practiced by teachers and students in the schools?
What are some of the benefits of meditation?
Are there any drawbacks of meditation?
What difference do you notice in yourself before and after meditation?
How long do you think you have to meditate to see the effects of meditation in your life?

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LINDA NOBLE

6. MINDFULNESS

A Lived Experience in Self-Awareness, Compassion and Understanding

ABSTRACT

In this chapter I present an autoethnography on mindful awareness and describe how mindfulness practice creates meaningful classroom interactions. Mindfulness is a commitment by teachers and students to be together, to be emotionally flexible, empathetic, and share in decision-making. In mindful classroom practice, relationships cogenerate emergent understanding. Through mindfulness, teachers and students throw out the systemic stressors of time, tests, and burnout. They abandon themselves to coexist in compassionate relationships. Being educated is being mindful. In this narrative, as the school year gets underway, my students and I come together in pools of thought. Teenagers on fire with hormones, dive in, they are excited to rekindle friendships. I gingerly dip my toe, resistant to fall, asking, "How can this be our best year?" In this chapter, I share my lived experience, my self-awareness and my perception of students' emerging understandings in light of mindfulness practice.

Keywords: awareness, mindful, relationship, compassion, humanism

I CAN'T TAKE THIS ANYMORE!

I am slumped over, half naked. I have arrived at rock bottom, my winter exile to the ER. Clutching an empty jar of painkillers, drawn to my knees, I crave tranquility, the shot in my spine. Then, I will be calm, the pain will be numb for a while. This is "my back problem." Or is it? This time I hear something different. "I can't take this anymore," my husband cries. "Why?" I ask myself. "This is not your back problem. It is my pain." "You can't take it!" The ER staff administer the shot. I leave with my pain suppressed, the question "Why?" unresolved.

I have spent my life in this field. Primary school in London, post-primary and undergraduate degree in British colonized Ireland, master's degrees and doctorate in the land of my dreams. I have toiled the soil, teaching over 20 years. Most recently, by day a high-school teacher, by night a college professor. I was experiencing significant stress. I was trying to figure out a way of ameliorating disharmonies

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 89–102.

in my life. I rationalized that my living situation and people in my life needed to change in order for me to heal. That day, in the ER, I realized that nothing was going to change. The pain would remain as long as I denied myself. I needed to reset.

At the Middle College National Consortium Conference in New Jersey (2015), I had the privilege of engaging with Diane Ravitch during her keynote address. Reminiscent of the tennis court oath, and inspired by the setting, and Ravitch's courageous work *Reign of Error* (2013), I made a standing public proclamation to stand with her. As fate would have it, before nightfall, I had a chance encounter with a dear friend, Malgorzata Powietrzynska, a very knowledgeable and experienced researcher. Malgorzata shared her experience researching mindfulness as part of the work conducted by Ken Tobin's team at the Graduate Center in New York. The joy and serendipity in our friendship, rekindled after 15 years, was exhilarating. Little did I realize that I had opened up a new chapter of my life. This is it. My path through mindfulness to self-awareness, compassion and understanding.

The day after the conference ended my plane touched down on vacation to my family in Ireland. My sister, Mandy, drove me from the airport on her way to a weeklong session on mindfulness practice for teachers, hosted by the Limerick Education Center. A universal plan was unfolding. It seemed that all I needed was to be present, accept and not judge. Without much thought or reservation, I joined Mandy. The plot was thickening. In a small, mildewed classroom, with fifteen Irish women, I laughed and cried about the joys and sorrows of teaching. Soothed by the veil of Irish mist caressing the fair land, as she has over the centuries, we gently rubbed each other's backs, inside the old schoolhouse. We sang songs, and lay on yoga mats with our toes wiggling in the air like mischievous, schoolgirls. On days we ate mindfully, I was reminded of attending convent school over 40 years earlier. But, this time there was no fear. There was no judgement. We were taking risks and falling down energized by liberating the folly of our egos. Attending to the whispers of our breath, we were celebrating life. As in all revolution; Enlightenment, Scientific, Glorious or otherwise; we conspired and shared our dreams. Could we bear "mindfulness" as a gift to benefit our students, our children. My life or life's purpose had not changed. My family and friends had not changed. But, something was very different. I could feel it in my spine!

The summer trip to Ireland illustrates the emergent nature of social life – my coming across mindfulness and making a decision to embrace it. When I returned to New York, I could not keep mindfulness in my life but delete it from my life's work. In the fall, I began to explore mindfulness practice in my classroom. The public high school students I teach are mainly from the Caribbean Islands, Jamaica, Haiti and the Dominican Republic. The school population is approximately 600 students; including, 72% Black, 9% Hispanic, 8% Asian and 5% White; with 73% free lunch and 6% Special Education students. Compared to the 69% citywide average, 99% of the students graduate within four years. I had taught social studies there for almost 10 years.

TEACHER AS RESEARCHER

Powietrzynska (this volume) in applying sociocultural lenses suggests research is meant to widen, sharpen, and nuance our understandings of the lifeworlds of ourselves and those we study. Lenses legitimize diverse ways of knowing, and acknowledge pathways to knowledge. Throughout this experience, I remained in the role of learner, learning what was going on in our classroom relationships. In addition to observing, I had numerous conversations with my students, taking careful notes to describe and understand how they interpreted what was happening. I asked questions to discover perceptions and interpretations that I could not directly observe. In such informal conversations, as Sharan Merriam (1998) notes, it was important to remain open to new ideas. I found that to be both mindful, and to learn a new way of viewing the world, I needed to be highly tolerant of ambiguity, uncertainty and uniqueness (difference).

THEORETICAL PERSPECTIVES: MINDFUL AWARENESS

In the technicist nature of objectives and performance, as outlined by Jim Gleeson (2010), my role had been limited to report on my students' performance through competitive assessments, structuring lessons around text, with formal authority based relationships. In contrast, *Mindfulness* has helped me to reconnect with myself; coming to know, and to care holistically for the students in my classroom. Being liberated from judgement of my students, and myself I am emotionally reset and energized with an open mindset. As a veteran teacher having over 20 years of experience, I have always attended to and cared for my students. Yet, now attention in my teaching practice is mindful and self-aware, empathetic and compassionate. I have come to appreciate that mindfulness is not just about paying more attention; but as Mark Williams and his colleagues (2007) point out, it's about the kind of attention we pay.

As James Greeno (1998) notes, in the past, attention has been focused on expert performance from the perspective of modeling the mental processes of an expert in a problem situation. However, a theoretical perspective of expertise has been recently emerging that considers ways in which the cognitive structures of a working group and the individual participants co-evolve in sharing knowledge. Kenneth Tobin (2015) points out that knowing, as cultural enactment, is experienced by social actors as schemas and practices, which are dialectically related. The heightened awareness of aspects of conduct creates possibilities for intentionally making changes for the purpose of improving the quality of social, political, and economic life. Mutual coexistence. As a teacher in an early college high school, it is difficult for me to separate moral and economic questions. Tolerance and acceptance of cultural diversity, traits of personal development are not detached from employability. Career and college readiness requires that we behave morally, are tolerant, and respect others.

In mindful classroom practice, we take risks with each other and become vulnerable. For example, in our daily breathing meditation practice guided by Diana Winston (2016) of UCLA Mindful Awarenss Research Center, my students and I sit down together and close our eyes, attending to ourselves and focusing on our individual breath. During an early sitting, my thoughts drifted to a visualization. I became an ancient Egyptian sphinx; large, whole and calm, seated with the students in our classroom. When I returned my attention to my breath, I felt a profound sense of warmth, appreciation, and connection as mediated by my heightened sense of awareness. Nicole Albrecht (2014) maintains that these elements are commonly associated with wellness characteristics that combine to form wellbeing. Shauna Shapiro and Linda Carlson (2009) note that enhanced wellbeing moves along a continuum from concerns about self to an expanded worldview of how individual decisions can benefit others. My greater self-awareness and connection makes me empathetic to my students, transforming our relationships.

Sue Smith (2010, 2013) includes in her research students' valued comments that reveal transformation as they cultivate mindfulness and meditation. Smith's findings are similar to my student reflections about the importance of our mindful classroom practice. "*Mindfulness*" to my students has been … "a moment of peace to relax, remembering and appreciating myself and those who care for me, a time to get my head together, the three minutes in this day when I can finally hear myself think …"

> Agwe states, "I will admit that at first I did not think that mindfulness was helpful. Now, I am thankful to be doing mindfulness in my school routine."
>
> Damerae adds, "Mindfulness has become part of the class for me. Sometimes, when we skip it, it feels weird and empty without it."
>
> "For me," writes Kai, "mindfulness has meant taking time from constantly doing things and being busy to relax and restart myself so that I am not overwhelmed and I can reflect on what has happened so far."
>
> Oria shared with me, "I use my time during mindfulness to think about the irony of the education system. The fact that a grade can determine my fate. I ponder the fact that we are all measured by the same means. We're ranked, passed or failed. I often think of ways to better teach students as well."
>
> Raeni writes, "Mindfulness for me has been a journey of sorts. I have had many peaceful experiences through mindfulness. I will continue to use it whenever I need a personal break from life."

This latter comment in particular speaks to the idea of education transcending the classroom space. It illustrates how mindful change that is personally negotiated, is owned.

As curriculum involves selection from among the culture there is a need to broaden the social-base of decision-making, including student voice. Mindfulness

is something that should be considered as school "content" as opposed to "fluff." It's a tool that people can use to catalyze improvements in wellbeing. Kenneth Tobin and friends (2014) advocate for science education to reflect sustainability of the living and the nonliving universe and wellness of beings. In this sense, being aware and engaging compassionately in mindful interactions, we are learning to coexist. This year, we shared this experience on my birthday, when my social studies students presented me with a collective card, noting,

Shona: Thank you so much for the work you do for making me feel safe in your classroom.

Steebeth: May you live to see many more years, and if not, know that your legacy of questioning lives on.

Ayida: Enjoy your birthday and live life to the fullest, you are one of the best teachers I ever had.

MINDFULNESS PRACTICE IN OUR CLASSROOM

At first, I was conservative. I did not want to take ownership of mindful practice. I was concentrated on doing my job and getting my students to pass our New York State Regents exam. As noted by Gleeson (2010), often curriculum partners control the secret garden of the curriculum, protecting their own sectoral interests and legitimizing official thinking regarding practices to maintain the status quo. My experience was in a room 25 feet by 35 feet with 18 desks to seat 34 students. The question was, how much did I want to get away from that by engaging in mindful practice? John Seely Brown and his colleagues (1989) point out learning is the process of entering a cultural meaning system. Arthur Wilson (1993) maintains that to learn, one must become embedded in the culture in which knowing and learning have meaning. Ultimately, entering into meaning systems shared by others requires entering into relationships with others. To engage with each other in mindful interactions took courage. We had to take risks in suspending judgement in order to learn to trust each other. If a student was late, cheating on an exam, or missing work it became the student's responsibility and my openness to learn that brought about understanding. In order to scaffold our learning, we built bridges across bias and blame. Our courageous acts of non-judgement created a safe space in which we could be ourselves and be together in a mindful culture.

A community's activities are framed by its culture. Hilary McLellan (1996) notes that meaning and purpose are socially constructed. Lev Vygotsky (1978) and Jean Lave (1988) stress the social roots of cognition. Vygotsky introduced the term "the zone of proximal development" in 1962, and, in her theory of "everyday activity," Lave (1988) expands upon Vygotsky's work, arguing that "cognition observed in everyday practice is distributed among mind, body, activity, and culturally organized setting" (p. 1). Learning is situated in interactions between and

among peripheral participants and full participants in a community of meaning. We created a mindful, compassionate framework for facing challenges and coexisting through empathy, sharing perspectives, and joint decision-making. Students would jokingly assign me homework, to share the joy in connections they were making to the material we discussed in class, for example, to watch a movie or read a book. Frequently, students stood opposite me in the classroom coteaching content, forming peer groups and selecting primary sources to co-annotate, using rubrics they created. Overtime, acceptance and non-judgement replaced fear, being emotionally flexible we tuned in to our needs for positive classroom interactions.

MINDFUL IMPACT: STUDENT VOICES

Self-Awareness

In a mindful self-reflection on "*Being*," a student voiced her emerging self-awareness. Her poem, depicts universal beauty, and illustrates a transformative response to conflicts of gender and race.

Beauty

Beauty is a gift everyone deserves
People see it from our faces to our curves
Beauty is universal
Beauty has no need for a rehearsal
We are unique
Woman and man
I don't deserve your critique
I am not less than
I am beautiful
Our beauty on the inside is
Who we are as an individual
So I'll just let your negativity slide
I am beautiful, wonderful and just me
It all matters on who you decide to be
– Lesia

This poem was not part of a formative or summative assessment. I spoke with Lesia and learned that her philosophy of life was created and shared with me as a result of her self-awareness and our relationship built through mindful practice. We later honored and celebrated the text in class with the author's reading and posting on the bulletin board. The student created the task and the text, there was no assigned rubric. Student performance and personal growth exceeded expectations. My mindful role as Lesia's teacher situated our mutual awareness, and our learning about values of race and gender in the authentic, cogenerated, culture of our classroom.

Compassion

Several student-created texts showed evidence of how our vulnerability and empathy were turning to compassion as we began to embrace mindfulness. In reflection on the concept of "*relationship,*" Shona was compelled to share her mindful connection to others in empathy toward a migrant woman's experience of sexual abuse.

My Crazy Syrian Mind

My Crazy Syrian Mind
It is justified for me
to sell my body, while
my pledge that is
most sacred to a women
has been taken away from me
I'm wondering here wondering
for days without
nothing, but the clothes on my back.
To you, you see me
clothed but I'm not,
I'm walking around all
naked and exposed.
For not
only does my husband know my beauty,
but others do.
For it is turned
into a true dark ugliness,
a black veil, now
throning my halo.

I'm now missing parts
of me for though I
feel empty, I felt
with all of me which
quickly disappeared into
flames, just like my
country and home.
Look what you done
to me. You left
me here begging
Where is Allah?
Where is Mohammed.
I'm being craved for.
I'm just here

in a lions den
being preyed upon.
All of me is gone.
I have none of me left.

I came for a better life
but it turns out I should
have stayed and be murdered.
for I am a dead women
walking, a rotten, filthy
woman trying to fight for her life.

YOU must not mutter a word!
Those men said:
Keep Quiet! Women!
So they say,
Keep Quiet Now!
That all the whispers
I hear all the time
that follow me around.
For if I mutter
a word I may be
killed, for that
they rob my pledge
away. Even my husband abuses it.

I go to the psychiatrist,
questioning me,
saying I have
a mental sickness
to them I seem crazy.
Everyone on the camp knows.
They keep their children
away from me,
for they too
believe I'm crazy.
They think I caused
all of it, for they believed
I went against Allah,
and my husband,
so now I'm being punished.

Am I a crazy Syrian?
Can Anyone Answer me
For only I could

testify what's in my "crazy"
Syrian Mind.
For my mind is
now like an abandoned
asylum that no one wants to hatch back.

The 14 year-old student's compassionate narrative honors the woman's emotion of shame and humanizes the experience. To humanize is to make more civilized and understandable. Our classroom was being infused with student created text that reflected our emerging sense of ethnic conflict, gender bias, and human values. In the context of top-down control, punitive teacher evaluation, assessment driven curriculum, and scripted instruction, our teacher talk and student texts connected us to voices beyond the walls and was liberating.

Celebrating Difference

An interdenominational student group, including Christians and Muslims, articulated their understanding of global concerns. In *Islam Through the Lens*, the group co-authored a response to a Carmelite missionary, report on customs of the Safavids and the rule of Shah' Abbas in 1604.

Islam Through the Lens

They say we are not the same
because we believe in a god named Allah
Because I believe In Muhammad
Because I wear the hijab to cover my head,
the way I dress
where being conservative and simple
is what makes a woman sexy,
which is my sense
of identity, but it does not work
They judge me because I want to read the Quran,
the way I pray to my god,
the way I celebrate which is apart from this world
I want to say I'm done but I'm not
But then again, I may have no choice

We are oppressed, and no one hears our cries
I thought we were done; I hate this part right here
The part where we are discriminated
No matter what we are
I am a Muslim

Remember when everyone said “Je Suis Charlie”
I Am Charlie! Justice for Charlie!”
No justice for Islam?
They continuously discriminate us,
Our religion is a failure to them
If you asked for world peace, they’d rather kill
But who are you? Who are we?

I thought it would stop but no, they tell us to go
To return to a dark abyss because we are monsters to the world
Who are we to judge?
You see the skin that you’re in? It makes us no different
Just a color that we all see when we look at each other

Remember in 9/11
And the corruption happened,
They blamed every Muslim
Telling us, “It was you who did this,
Go back to your country”
Which makes us now branded
to being a terrorist
But what can I say
I am Muslim

You would think
it stopped even amongst our culture
But it didn’t.
They use our religion
to justify cruelty
to humanity, they
are disgraces to
our religion, to our
culture, for they
go against Allah and Mohammed
teachings, the actions they take
is like slapping Mohammed
in the face.

You create enemies
division and confusion like the Serpent
did to Adam and Eve.
For goodness sake
can’t you see your destroying our religion?

For we pray for everybody even our enemies,
not kill a man like he's a chicken for supper.
Can't you see your anger
is not from Allah, but
from the anger
your ancestors
passed on from generation
to generation as a form
of distraction to prevent
you from the real purpose of Islam?
Can't you all see?
Can't you all see
through the lens
of a Muslim Now?

The students stood, arguing about religious bias. They debated and labored semantics. Their words mattered. Through their text, a version of history was uniting them beyond the classroom. In this mindfulness practice, I have a deeper appreciation for our relationships, and trust in our interactions. My self-awareness liberates me from attachment to an "expert ego." In paying non-judgmental attention, and being open to each other, we are creating understanding.

THE END: TOWARD A NEW BEGINNING OF HUMANISM AND DEMOCRACY IN URBAN EDUCATION

In education, goals are treated independently ignoring the overlap between equity and equality; social and personal development. Education for democracy, schooling for psychosocial as well as intellectual development is devalued. Within the current environment there is a division of labor between the curriculum expert and teachers as curriculum implementers. As William Pinar and friends (2004) note, when teachers are reduced to technicians managing student productivity, a school is no longer a school but a business. Richard Ingersoll and Thomas Smith (2004) report that up to one half of teachers leave the profession within their first five years of teaching. Tobin (2015) and friends have researched instances of angry outbursts that indicate intense emotions might be damaging to the health of teachers and students. Tobin's ongoing research revealed that teachers and students might protect their wellbeing if they had strategies for ameliorating intense emotions. Most urban classrooms studied were highly toxic for teachers, who expressed intense emotions in terms of heightened blood pressure, high pulse rate, and low percentages of oxygen in the blood. As a direct result of my work with teachers and graduate students, I grew gravely concerned about their high level of stress teaching in schools. The teachers' stress was compounded by the stress their students felt in

large part due to social and economic injustice. For students of hunger, students of pain, student victims, there is no justice, no peace. No safe place.

This past summer, I found a personal path back to health and peace through mindfulness. This fall, I decided to bring mindfulness into my teaching practice. The student voice shared in this chapter is a direct result of the safe place we created by paying attention to our breath. The public school system is experiencing a fiscal crisis. Teachers and students face a high stakes punitive environment. The neglect of teacher research in informing curriculum design, implementation, and assessment; has silenced debate. The strain of mercantilist philosophy has weakened intellectual and cultural life. Students leave education lacking a valued philosophy of life or an appreciation of global perspective. Educational narratives and qualitative studies that explore the person-centered nature of education and focus on values can transcend the utilitarian concept of the economic agenda that dominates educational policy and practice. In the Irish context, Garret Fitzgerald (2007) called on principals and teachers through their privileged access to lay the ethical foundations of new civic republicanism, or, find an ethical wasteland, a society without values corroded by materialism. Neuroscientists, Richard Davidson and friends (MLERN, 2012), and researchers, Powietrzynska et al. (2015), noting scientific evidence that supports the benefits associated with mindfulness practices, advocate for the legitimate inclusion of this knowledge base in schools. As a post-primary school teacher certified by the Irish Teaching Council; a New York City public high school teacher, and college educator, this autoethnography is part of a grassroots-like movement, a call to reset the system from within. Can we suspend judgement; engage awareness, compassion, and understanding, in order to breathe humanism into our lived experience in education? From the perspective of authentic inquiry and ethical obligation, we must encourage interpretive research on mindfulness toward improvement in the quality of life for teachers and students in urban education. Authentic practitioner research is needed to counter think tank access to decision-makers. Marketization of educational research that impacts fiscal policy in education is becoming more invisible. Gleeson (2010) and Tobin (2015) note that professionalism in teaching requires a shift by teachers to participate in promoting "the common good." Mindfulness, as an emancipatory and transformative heuristic, requires further research and debate.

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SHANNON MURPHY

7. ENGAGING WITH SILENCE

Using Art as a Heuristic to Develop Understanding about Meditation

ABSTRACT

Silence can be a provocative tool in an education setting. Research suggests that contemplative practices that incorporate silence, such as meditation, can help students focus. This article investigates how to help students understand meditation by using a work of art as a heuristic. During a weeklong camp at the Solomon R. Guggenheim Museum, students meditated daily in the art studio and galleries, embracing silence both mentally and physically. Through a hermeneutic art exploration of On Kawara's *Date Paintings*, students unpacked their understanding of meditation and developed a polysemic understanding of their practice.

Keywords: meditation, heuristic, hermeneutics, museum education, art exploration, mindfulness, embodied learning

FOCUSING ON ART

In the art museum I often ask students to take a moment to look, just look, at a painting. In my mind, this is a gift, a luxurious amount of time to see and encounter the work of art on their own without interruption, but their attention wavers almost instantly, and their impatience grows. My students are not alone; the amount of time visitors typically spend with a museum object is less than thirty seconds (Falk, 1982). In a guided group experience with art, I'm able to re-direct their attention back to the object using inquiry based conversations and multimodal activities, but the silent, internal experience gets lost. Elusive is a personal, contemplative experience with the art object, a different way of knowing. I turned to meditation as a tool to help students discover a quiet presence with the object, with thoughts or without them, encountering the work of art on their own accord.

Interest in contemplative practices, such as meditation, yoga, or mindfulness, is growing in the field of education. Researchers point to many benefits of meditation for students beyond attention skills, such as emotional regulation, resilience, wellbeing, and creativity (e.g., Shapiro et al., 2015). There is a growing community of advocates for contemplative practices in schools who promote more research on its effectiveness and application (e.g., Ergas, 2014). While there are countless ways to experience meditation, how to understand the practice is difficult.

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 103–114.

In an art museum, where we praise mistakes, breaking rules and innovation, educators have the opportunity to explore ideas from the practical to the absurd. At the Solomon R. Guggenheim Museum, I began experimenting with meditation techniques during my tours in front of paintings and sculptures. I led students through formal guided meditations – I invited them to try looking without emphasizing their thoughts, and I tried to create opportunities for silence. As I practiced, my delivery improved and I developed a repertoire of engaging meditative activities. Along the way, I also discovered a tool for helping my students learn about meditation. During a weeklong camp program, my students and I learned how to use a work of art as a heuristic to help us unpack our thoughts on meditation.

MEDITATING AT THE GUGGENHEIM

During the spring of 2015 I co-taught a weeklong spring break camp at the Guggenheim with teaching artist Jodi Messina-Nozawa. Seventeen students ranged in age between seven and eleven years old. During camp, students explored art making in the studio and works of art in the galleries. The theme of the week was to explore people through art. We considered how elements like facial expression, body language, clothing, and setting gave us clues to a person's character. The students collaged self-portraits, they made figure drawings of each other, and they even created costumes with fabric and found materials. In the galleries, they saw how artists wrestled with expression in the same way that they did in the studio. At the end of camp, students reflected on their work with an exhibition, and by taking their family on a tour of the Museum (Figure 1).

In both the galleries and the art studio, we focused on inquiry-based methods to foster critical thinking and encourage multiple responses to works of art. Developing a conversation and interpreting a work of art is a delicate process. During an art exploration, I ask open-ended questions and encourage close looking. As the conversation develops, I provide information during opportune moments to elevate the discussion or take us in a new direction. Information can very easily shut a conversation down, so I must be careful about when and if to provide input. For instance, biographical information about an artist might inform the work of art. Knowing that Vincent van Gogh suffered from mental distress might illuminate his painting. On the other hand, it could also derail us from our conversation about the work of art, which has a life of its own. Also important to art explorations are activities, such as drawing, writing, or movement exercises to help students interpret the work of art in multiple modalities. The kinds of questions, information, and activities are all dependent on the theme and the work of art we're exploring.

Museum educators Rika Burnham and Elliott Kai-Kee (2011) describe the process of interpretation in the art museum to be akin to Hans-Georg Gadamer's hermeneutic theory where the object reveals itself within a dialogue, and understanding is continually revised through the process. They write, "In museum

Figure 1. Student art exhibition at the Guggenheim

practice, the hermeneutic circle is punctuated by moments of repose for silent reflection, and by moments of consensus" (Burnham & Kai-Kee, 2011, p. 61). Along with conversations, information, and activities, meditation adds to the hermeneutic circle by developing and honoring time for silent reflection. Just as we teach our

students how to engage in conversation and activities, we also need to teach them how to engage in silence.

During camp we included meditation throughout the week in both the art studio and the galleries to explore ways we could engage in silence. We started each day with a sitting meditation, and we received works of art with a similar presence. When we looked at paintings and sculptures in the galleries, we used integral meditations to approach each object. Joseph Loizzo describes integral meditation as "using a combination of visual and auditory imagery with breath-induced transformational affect" (Loizzo, 2014, p. 47). Our integral meditations included guided looking, mudras, and breathing exercises; all while focusing our eyes on the work of art. The exact kind of integral meditation always varied depending on the mood of the group, and the type of art we were exploring.

A PERSONAL SILENCE

We began each morning of camp with a sitting meditation to embody a fresh start, and introduced meditation as a practice students could do on their own, anywhere. I didn't provide the students with a lengthy explanation of meditation, but described it simply as an exercise for our brains, just as we exercise our bodies. I invited everyone to get comfortable in their seat, focus on their breath, and close their eyes as I set the timer. On Monday morning we meditated for one minute, and each day after we added thirty seconds. On the first day, it was evident that the group of students had a profound amount of energy, and finding quiet moments was going to be hard. The meditation was not only new, but very challenging for some of them. We persevered and discussed alternative ways to "exercise the brain," like counting numbers or scanning our awareness to different parts of our body, while other students focused on their breath. Their personal silence became a small part of our daily routine.

A THOUGHTFUL SILENCE

Throughout the week, the students engaged in silence in a number of different ways. During a thoughtful silence, the students meditated on a fixed object, a painting, and focused their thoughts on that object alone. We sat in front of Pablo Picasso's painting *Woman Ironing* (1904) during our first session in the galleries. The students had been exploring facial expression in the art studio, and had just made brush and ink self-portraits. At the Picasso, I began by asking everyone to find a comfortable seat and put away any distractions (e.g., sketchbooks) they might have. I then explained that we were going to get ready to look at the painting by doing a series of alternate side nostril breathing, and how this would center our bodies. After the exercise, I invited the group to look at the Picasso silently for one minute, gathering information about the painting that struck them as interesting.

The integration of a visual image is prevalent to many meditation practices, but a work of art is unique for its originality and physical presence. Ellen Langer

(1997) writes about a mindful approach with works of art. She argues that the most effective way to pay attention to a subject or object is to consider it with novelty. "A mindful approach to any activity has three characteristics: the continuous creation of new categories; openness to new information; and an implicit awareness of more than one perspective" (Langer, 1997, p. 4). Instead of asking students to simply "take some time to look at this painting," a mindful approach would be to ask students to "take some time to look at this painting and gather a list of thoughts about what makes it unique and interesting to you." This form of meditation invites many thoughts and cultivates difference within a focused framework.

The silent time students take to gather information is fuel for conversation and building interpretation. Generally, when it comes time to talk, everyone is excited to share what he or she discovered. Another technique we tried in the galleries to help students focus was a simple mudra called tenting, or steepling. A mudra is a hand position meant to create an energy flow within the body. Just like a cartoon villain knocks his fingers together in a gentle rhythm until they reach a steeple, the tenting mudra is meant to create a thoughtful experience. The idea of the mudra is playful, but the act of tenting your fingers together, in front of a work of art, truly repositions your body for a new awareness. Most important to these experiences is the gratitude that goes into the set up; making sure students are physically comfortable, they're mentally prepared to focus, and they know their thoughts are appreciated.

A QUIET SILENCE

To contrast the thoughtful meditations, we also indulged in meditations where students were invited to "just be" with the work of art. Instead of cultivating their thoughts, we invited them to be in their bodies, and simply enjoy looking at a work of art for a quiet moment. On the second day of camp, we focused on how artists express character through body language. After a life drawing session in the studio, we went upstairs into the galleries to visit a painting that depicted figures, *Dancers in Green and Yellow* (1903) by Edgar Degas. To introduce them to the object, I demonstrated how to do a Jin Shin Jyutsu mudra, placing their right thumbs through their left middle and ring finger, then clutching the left little and ring finger with the right hand (Figure 2). I explained that the mudra was meant to calm their body and relieve any tension or stress they might be feeling. I invited the group to just look and be with the painting for one minute. In a gentle way, by having the students focus just on their body, I alluded to an alternative to thinking (Ergas, 2104). Instead of looking for novelty, the students were invited to take a calm, embodied approach to the painting.

Not all experiences need to be focused on our thoughts. In the 1960s Susan Sontag wrote about how modern artists tended towards distancing themselves from interpretation. In *Against Interpretation s*he advocated for a physical experience with art, "What is important now is to recover our senses. We must learn to see more, to hear more, to feel more … Transparence means experiencing the luminousness

Figure 2. Students holding a Jin Shin Jyutsu mudra in the galleries

of the things in itself, of things being what they are" (Sontag, 1961, pp. 13–14). The emphasis on experiencing *things being what they are* rings true to the tenets of a meditation practice, where there is a focus on presence. The practice of a person non-doing, without the distractions of an end goal, presents an opportunity to allow for an authentic account of the person's feelings as they arise (Kabat-Zinn, 1994).

A purely sensual experience with a work of art can be fun and elucidating. On Thursday, we considered how place related to a person's character. In the galleries, I invited the campers to pretend that their bodies were shrunken, and that they just hopped into the *Mountains at Saint-Rémy* (1889) by Vincent van Gogh. As they floated around the painting, they were invited to smell, touch, listen, and taste the scene around them. Instead of a verbal interpretation, they experienced the painting physically, the same way the painting was created. The decision to hold focus and just admire the formal elements of a painting cultivates a particular sensitivity towards experience, and perhaps a sense of peace. We could have stopped there, but as a group, we added this sensual experience to the hermeneutic circle and engaged

in both a drawing activity, and a lengthy conversation after they floated around the painting. By not focusing first on their thoughts about *Mountains at Saint-Rémy,* they were able to begin the hermeneutic process with their intuition (Figure 3).

Figure 3. Students exploring Vincent van Gogh's Mountains at Saint-Rémy (Montagnes à Saint-Rémy), July 1889, Oil on canvas, 71.8 × 90.8 cm, Solomon R. Guggenheim Museum, Thannhauser Collection, Gift, Justin K. Thannhauser

USING ART AS A HEURISTIC

Now that the students had a number of different experiences with meditation, I wanted to help them develop their understanding of the practice. A community of educators at the Graduate Center introduced me to the use of heuristics in education as a tool for unpacking a complicated concept like meditation. Scientists, engineers, and mathematicians frequently use heuristics as a shortcut, or way to save time, but for educators, it takes on a different purpose. The term has Greek origins and means "serving to find out or discover." Kenneth Tobin refers to a heuristic as a "shape shifter," because it's a malleable tool that can be changed to reflect context (Tobin, 2015, p. 16). Malgorzata Powietrzynska (2015a) suggests using a heuristic as a means to unpack a construct. In her research, she created a heuristic that looks like a survey of questions to promote reflexivity about mindfulness among pre-service and in-service teachers. Each question is meant to help unpack understanding of mindfulness, and to encourage students to become aware of the unaware (Bourdieu & Wacquant, 1992).

At the Guggenheim, the shape of the heuristic became a work of art, a medium that subjectively creates questions for the viewer.

Twelve Sundays by On Kawara became the work we chose to focus on as our heuristic, to both gauge and further our understanding of meditation. *Twelve Sundays* belong to Kawara's *Date Paintings*, or *Today* series (Figure 4). They're often considered an example of conceptual art, where much of the substance of a work's meaning derives from the process of creation, rather than the finished product. On Kawara began making *Date Paintings* in 1966, and continued to make them up until his death in 2014. He mostly made them sporadically, but occasionally he focused on a span of time. For instance, one set made between January 1 1970 and March 31 1970 was titled *Everyday Meditation.* Art historian Jeffrey Weiss (2015) likens Kawara's practice of creating *Date Paintings* to meditation. There is a strong meditative quality to the *Date Paintings* because they're about time and repetition. While meditation is one theme of the *Date Paintings,* historians also suggest themes such as human experience, consciousness, existence or even death (Woo, 2010).

Figure 4. On Kawara-Silence, Solomon R. Guggenheim museum, New York, February 6–May 3, 2015. Photograph: David Heald©SRGF, NY

When we approached *Twelve Sundays,* students were eager to ask questions about what they saw, but I encouraged them to hold a mudra for a few moments in silence first. This time, I had them hug their body with their arms because it was the end of a long week in which they'd been working very hard – they deserved a hug. After a more focused observation in their mudra, the students discovered

many details such as the different background colors, patterns in the numbers, the sameness between canvas sizes, different orientations of dates, and how each month of the year was represented. Through the course of their discoveries, I shared with the students that On Kawara made *Date Paintings* on occasion for over fifty years, and that each painting represented the day it was painted. When the students asked about how the paintings were made, I shared with them an image documenting Kawara's meticulous painting process.

An initial look at On Kawara's *Date Paintings* might be deceptive because the hand of the artist appears absent (Figure 5). The paintings appear mechanical and stenciled in. For this reason, it was important to share images of Kawara's process with the group. The images delineate the delicate details Kawara painstakingly took to create a painting to initially appear automatic and unemotional. Within the hermeneutic circle, our understanding of the *Date Paintings* changed and became much more exciting with this information. Randall Collins (2004) describes the key elements of an interaction ritual to be a group of people within a barrier, focusing their attention on a common object, who share a common mood or emotional experience. Collins highlights bodily presence as one of the necessary ingredients for successful interaction. Sitting in the gallery, the students' attention was keenly focused on the mysteries of *Twelve Sundays.* The body of the artist became present after they learned about Kawara's process. It was only then that they began to see

Figure 5. On Kawara-Silence, Solomon R. Guggenheim Museum, New York, February 6–May 3, 2015. Photograph: David Heald©SRGF, NY

the letters and numbers for what they truly were: jagged, imperfect, thick, thin – handmade. The paintings that first appeared mechanical were actually painted by hand, and heavily charged with emotions.

The students were wildly curious about the drive to paint dates. Through their discussions they theorized that perhaps it was a way for the artist to document his art making through the years, perhaps the dates were special for some reason, or maybe it was about patterns. During the discussion, I shared with the group that On Kawara had to finish a *Date Painting* on the day it was made, so if he was painting on March 2, 1973, he had to finish the March 2, 1973 *Date Painting* on that day. If he didn't finish it before midnight, he would destroy it. The students then wondered why he didn't make a *Date Painting* everyday, which brought us back hermeneutically to our work of art. The last and final layer of our conversation was about meditation. I told the students that On Kawara sometimes related his *Date Paintings* to meditation, and I asked them, "How are these paintings, like a meditation?"

Sarah: Some people, if they really love painting, if they paint, it makes them feel calm.

Evan: Making a painting everyday is like a meditation because it helps to express his feelings and get it out.

Anne: He's not really doing anything, he's just thinking

Sherman: There's only a few words in the middle, and there's a lot of negative space. So, there's a lot of things in one day that are happening, but instead of drawing it all, he just wrote down the day and number. So I think there's the negative space to keep everything simple and that makes it like a meditation.

Jamal: Maybe it's a meditation because it's so many dates. There's a lot of them, so you can relax on the dates. You can enjoy the moment by writing it down.

The comments reflect the students' dialogical thinking in relation to art making, which they had been focusing on all week, meditation, and the conversation about *Twelve Sundays*. What is most salient is the breadth of their comments. For instance Sarah coupled what she perceived to be Kawara's love for painting, with a calm feeling she associated with meditation. Sherman used the formal elements of the painting as a metaphor for the everyday. He related the emptiness of the painting to a simplification brought on by meditation. Jamal, on the other hand, saw the process of looking at *Date Paintings* and making *Date Paintings* as a way to relax and be present in the moment. *Twelve Sundays* truly created a polysemic understanding of meditation.

The students' ideas did not reflect meditation alone, but were synthesized with the work of art. *Twelve Sundays* was just one characteristic in the heuristic, and perhaps more would be necessary for generating a larger, and deeper understanding of a concept as complex as meditation. Powietrzynska suggested that young

children might respond to a heuristic delivered as a narrative or story (2015b). Perhaps the medium of the heuristic could change, or another option could be to use more works of art. Modern and contemporary artists such as Marina Abramović, Agnes Martin, Yoko Ono, Georgio Morandi, or Paul Cézanne also include meditative qualities in their work. Visual art commands our attention as a form of non-verbal communication, which is fitting for exploring the internal activity of contemplative practices. Using a work of art as a heuristic to unpack a concept like meditation allows for a way of knowing that combines a visual and verbal understanding.

AN EVOLVING DEFINITION OF MEDITATION

On the morning of the last day of camp, I was so frazzled with the students' exhibition and a guest video taping the class, I forgot to lead the morning meditation. To my surprise, my seemingly skeptical students reminded me. The power of routine is certainly strong, but maybe they did have an interest in meditation? Our sitting meditation in the art studio wasn't presented as a complicated, all-important activity, but simply as a way to quietly start our day. Their practice and understanding of meditation truly remained their own.

By using a work of art as a heuristic, the children had a concrete object to attach their ideas about meditation to. It provided them with a space to reflect and verbalize their thoughts. Because we carefully explored the *Date Paintings* together, the hermeneutic circle helped students to synthesize their personal ideas about the practice of meditation, but also understand that there were many definitions. The *Date Paintings* succeeded as a heuristic because they thematically related to meditation, but they weren't didactic. One's interpretation of the *Date Paintings* could continually change and grow, just as one's definition of meditation can evolve.

I ran into one of the campers, Sarah, at a family program at the Guggenheim five months after camp, and I asked her what she remembered about our meditations. She said, "It was a way for us to take a break, and restart our brains." What I found most remarkable was how easily Sarah was able to answer my question. The time we spent on meditation during camp was incredibly small compared to the time we spent on art. I hope that by developing the students' understanding of meditation, they not only discovered a comfort with the practice, but also a curiosity for future investigation. Perhaps later when they look at art on their own, they'll linger longer in quiet contemplation; thinking or not thinking.

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8. MINDFULNESS IN EDUCATION

Human Bodies in Focus

ABSTRACT

This work addresses the conception of body and ways it is conceived in society. The construction of this conception is connected with the establishment of differences in historical and cultural perspectives. At school, body is normally presented in a biological approach that is guided by rigid aesthetic patterns. For a more plural pedagogical work at school it is important to be aware about bodies and their differences. In this context we present and analyze teachers' conceptions about the body after being exposed to images of bodies situated in different contexts. The images serve as a trigger to initiate a discussion that focuses on differences and foster a more mindful state concerning the body.

Keywords: mindfulness, science education, human bodies, differences, in-service courses

WHAT IS A HUMAN BODY?

Given a context of a multiplicity of bodies – each one with its own distinguishing characteristics – how might one address the question of what is a human body without thinking about a certain body? From the perspective of an artist, a body differs from perspectives of a doctor or a personal trainer. Also, we emphasize that our bodies are not like one another's, and they are not like yours!

When we arrive at school (a plural environment) with our singular bodies, we face several others' bodies. In trying to define them, the school opts to make an oversimplification: head, chest, and limbs. This simplification excludes those bodies that do not meet the norms established for each category or that do not fit into this classification system. The classification system also impacts toys used in play at school, excluding, for example, dolls without arms or legs.

The necessity to live in a society in which bodies become an important component to define identity requires us to think about them more deeply. Jrène Rahm (2007) showed the way in which students assign certain types of language (patterns of enunciation) to certain social groups. The same kind of relation may be established

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 115–133.

with the body. Some bodies become associated with social groups, and that causes conflicts in how one is viewed by others. The bodies presented through different media and in public spaces reflect an ideal that is hard for individuals to fit. This lack of synchrony between real bodies and idealized ones is a source of pain and frustration for many. This struggle leads people to develop nutrition disorders such as bulimia and health projects such as low self-esteem, among other problems. From a collective perspective, the adoption of idealized patterns implies the exercise of intolerance, which is one of the more damaging aspects of our life in society. The existence of idealized bodies in establishing hierarchies between people legitimizes some and delegitimizes others. In such a situation, it is difficult to establish a healthy community life in dealing with the differences that exist.

The diversity of bodies is frequently ignored at school, not only by the fact that the concept of the "body" is normally approached in a biological way in the school curriculum, but mainly by the existence of political and cultural power in the school that acts *vis-a-vis* a normalization of the differences. Most teachers are not aware of the fact that they are messengers, who spread a model of standardized bodies with which most children and adults cannot identify. This matter, far from being restricted to the aspect of the body, appears in other instances, such as the process of formation of identity throughout the school. In one case, the science content presented to students was often produced only by men, which made the girls feel isolated and inhibited in their science classes (Brickhouse & Potter, 2001). At the same time, the harms mentioned previously are also out of the teachers' control since most are not aware of this aspect of their conduct – when they do not explore diversity, they reinforce an impossible standard to be followed by many, which establishes a norm by which to judge people and incites students' lack of compassion. The difficulty to place oneself in the others' place is at the center of many problems, such as bullying, within the school context, with additional ethical and moral issues unfolding.

The previous thought about bodies is especially important in the context of child education, in which children first approach their own bodies. In the case of child education, we have children coming into contact with another world that is different from that which is known by them, by their families, by their geography, and by their religion and habits. However, familiarity with the diversity of bodies with their biological and cultural variations is required if we want to take a non-biased approach toward differences for these children.

The theme of body differences is one that needs attention. In the following section we review scholarship that has addressed the theme of difference. However, it seems important to discuss this problem from the perspective of how capable teachers are to establish a state of consciousness to deal with different emotions and attitudes that come from this context. From this last perspective, the main idea is to deal with emotional patterns and also with mindfulness (Powietrzynska, Tobin, & Alexakos, 2015). The connection between "aware" and "unaware" is at the core of the study of mindfulness, and the latest studies show how we can change patterns

of rational thinking so that a more balanced state and emotional wellbeing can be achieved.

In this chapter we describe ways to develop in teachers of the initial school grades a more balanced state and emotional wellbeing within the body in its multiple forms. The expected result is that when the teacher becomes aware of the possibilities to establish such a state, s/he can work intensively under the theme of the body with her/his students to establish more healthy ways of living in the community, where bodies with their unique characteristics, are accepted as viable human beings.

STANDARDS AND DIFFERENCES

Based on the considerations brought to light by Gimeno Sacristán and Péres Gómez (1998), concern for the school curriculum includes not only studies of what is taught – i.e., not only the traditional courses but also experiences regarding the re-creation of culture and explicitly addressing problematic situations that occur within the school. In a society whose normative referent is all too frequently the Caucasian heterosexual man with urban and Christian habits, for example, there are also norms, which serve as benchmarks for the body – for what is considered to be normal, acceptable, and deviant.

Richard Miskolci (2005), in a study entitled "From Deviation to the Differences," defines a difference as an evaluation category that calls to question the values and concepts that pose as criteria to constitute the "other" in our society. In turn, this other was built socially from a reference that came from the consolidation process of the bourgeois class, which has always been received as a derogative classification (deviant, abnormal, or pathologic).

In speaking about difference, we highlight some sociological aspects that are important to understanding. Difference, whatever it happens to be, is a construct built always in a particular situation where some norms or standards are given priority. In a society prioritizing adult perspectives, children's perspectives are likely different and marginalized if they think, react, and make sense of the world in a different manner than adults. In a society where the standards are White, heterosexual, urban, masculine, and Christian, there is often a hierarchy that produces differences in relation to other social categories such as Black, homosexual, country person, and other categories and associated customs that align with different ethical and religious values.

Given these scenarios, it makes sense to query the "normality" of established standards used as "the natural way things are." There might be a movement of affirmative action willing to support things that were historically considered lower and inferior. There is a potential interest in education studies that interrogate difference if we consider school and other eduational instituons built in XVIII century as places of production and reproduction of social inequalities by classifiying, lowering, and not dealing with the differences.

The ideas of Michel Foucault (2005) resonate with the theme of difference – he states that power in society was displaced from the sober person to the establishment of some norms. Thus, from the second half of XVIII centrury, disciplinary power appeared and controlled the new born bourgeois society. The disciplines assured a harmonious and articulate society. At the same moment, the discipline started to control individual conduct in establshing relations of power regulated by some norms.

It is intersting to note that, at that point, the church made an alliance with the State in order to improve a new modality of power. A new way to be, to rapport with others, to dress, to live the Faith, to preserve the body were outlined and corresponding punishement for differences was defined and classified. According to Foucault (2005), the punishment starts to have a social function to regulate the individus and inaugurate the power rapports as a way of control in order to attend to the interests of the bourgeoisie who needs the useful, productive and disciplined bodies. The bodies will just have utility if they are productive and submisse to the norms and there was no place for diferences and singularities.

Nevertheless, according to Miskolci, there is a movement towards understanding that this idea of difference is recent (second half of the 20th century), and its purpose is to question the established rules and, likewise, reinforce what was historically considered negative. The author understands that there was an epistemological inflection of the deviation that made possible "the passage of the studies about normality and a deviation to an approach about differences" (Miskolci, 2005); such differences underestimate their presence instead of perceiving difference as positive. The association of physical appearances with heredity was pronounced during and after the Second World War, and were a rationale for the greatest genocide of humankind.

The construction of the body concept also includes the discussion of differences. In order to understand different bodies present in the field of education and more specifically in the classroom, we must consider how each body carries the signature of some historical and cultural signs/marks. In this context, we can consider the following questions: how is education involved in the marking (i.e., inscribing) of certain types of bodies? How are the experiences lived by the body in several educational contexts? Is it possible to design education to explore the difference? Who makes the difference? What differences are there, and where do they come from?

Most textbooks feature a male adult as a general human body image, standardized in terms of the displayed external and internal constituent parts. Furthermore, we are bombarded by the media (which permeates schools through magazines, films, and also through the children, teachers, and school staff members' imaginations) and the image of a white and lean body as a synonym of a beautiful and healthy person. However, in other times, as evident in textual and iconic records, the model of beauty was another body, represented by a stout woman. In this sense, Jocimar Daolio (1995, p. 37) states,

> […] Beyond the physical similarities or differences, there is a set of meanings that each society carves in its citizens over time, such meanings that define what the body is in several ways.

Thus, the body is a product of culture, built differently in each social setting; it is what brings the assigned meaning within each culture – extending beyond biological similarities and differences. We cannot ignore the fact that in addition to consideration of the body in terms of biology (and a specific biology), the body is also a social construction that serves as an ideology. Conceiving the body as merely biological and – explicitly or implicitly – as natural; therefore leads one to understand the nature of human as a prerequisite of culture.

To illustrate these ideas, we might consider bodies and body-related practices within cultures that make us mindful about customs that are considered normal and appealing in a culture but are not universally considered as such. For example, consider the long-necked "giraffe" women of Thailand; the custom of having female feet tied to keep them small that is still present in certain regions of Japan; female genital mutilation in certain African communities; trans-sexuality; and body art and body modification involving tattoos, self-mutilation, use of ear reamers, and subcutaneous implants. Examples such as these led Cris Shilling (2001) to consider the body as both a biological and social entity, acknowledging that the body is unfinished at birth and that, in the course of life, it changes through intertwined biological and social processes. Accordingly, it is necessary to consider the body as a social object in a particular context that includes but is not limited to its biological bases.

MINDFULNESS

Based on the ideas discussed thus far, we aim to present and analyze concepts held about the body by the elementary school teachers. The purpose of this paper goes beyond just using rating scales to quantify and list the ways teachers understand bodies and pedagogical strategies they use to teach this subject. The plan is to overcome previous understandings and to reveal evidence of change in epistemological, ontological, and axiological stances regarding the human body as well as to stimulate changes in the manner in which this subject is taught in the classroom. This implies a paradigm shift in the rational and ethical thought of teachers that would allow them to work with the subject of the body in schools on a different level of consciousness (Davidson & Begley, 2012). The debate over the body and the emphasis on the differences in individuals is likely to promote the development of tolerance. Although an important step toward changing attitudes regarding bodies in all their multiple expressions, tolerance is another way to accept differences or not to judge. This state of mind involves the ability to be in other people's shoes and to be helpful, exercising the original meaning of the word "compassion."

The Dalai Lama (2014) makes clear several ways of understanding the notion of compassion:

> I would like to explain what the importance of love and compassion is. It is important to know what compassion is; sometimes we think it is to feel pity, but this is not compassion. Compassion is a sense of caring, but more than that, it is the clear notion that all beings have exactly the same right to happiness. This comprehension is what brings us the sense of compassion… True compassion is what leads us to see the other person as having exactly the same right I have for happiness**.**

The qualities of non-judgment, acceptance of differences, and compassion are linked to awareness, i.e., to uncover the bias, judgments, and rules of conduct within us, those that were blended in an unconscious way. Emotions and feelings are associated with situations in which we identify differences in who we are and how we live. Bodies, specifically speaking, as an important part of our identity, are among the primary sources of discrimination. Our reactions of contempt, anger, and rejection as well as sympathy, empathy, and wonder in many cases are born from the first contact we have with other human beings. These emotions are internal and emerge from our bodies either through facial expressions by positioning our heads, backs, and limbs and changes in our breathing or our heartbeats; we react to what we perceive and interpret as differences. Hence, bodies are the origin and extend the consequences of the encounters one has with others.

RESEARCH DEVELOPMENT

In this work, reports have been analyzed in an online discussion forum for elementary school teachers who had participated in an in-service course entitled "Improvement in Technical Education." The course was 128 hours in length and was divided into 4 modules. The body was one of the subjects addressed in the third module, which lasted a week and was oriented toward the initial grades in elementary school. Five classes coordinated by a tutor were involved in this study.

A discussion forum was preceded by a presentation that utilized many images of bodies in different contexts: i) bodies in the arts, with the painting, "Abaporu," by Tarsila do Amaral, one of the pioneer paintings of the Brazilian Anthropophagy Movement of 1928, with its disproportionate dimensions; "The Black Woman," by the same author; and the statue of Alison Lapper, who was born in London with short legs and no upper limbs, among others, ii) bodies in real life with images of the bodies without limbs (of athletes who participated in the Special Olympics), bodies in religious rituals, anorexic and overweight bodies, black bodies, fetal bodies, bodies of children and the elderly, bodies of transvestites, and mutilated, tattooed, and amputated bodies. The presentation also featured bodies from textbooks, including images intended to be ideal – e.g., white, masculine, static bodies. Some of the photos used in the activity are presented below, with

a personal interpretation of authors seeking to justify their choice and what one would expect of their performance of the activity. The photo itself is displayed in some cases. Sometimes links to access the Internet material are provided due to copyright reasons.

We chose to illustrate human bodies without the upper and/or lower limbs, inserted in several contexts of everyday life in order to contextualize the bodies found in everyday life. A Paralympic athlete without upper limbs, shown in Figure 1, contrasts with the classification of the human body as pictured in textbooks: the vast majority having head, trunk, and limbs.

Figure 1. Para Olympic athlete, Cristopher Tronco
Source: UOL Blog, accessible at http://umexemplodevida.zip.net

We also sought images that could reflect the discussion of bodies in their cultural context, aiming to promote insight among teachers about the culture printed in human bodies and expressed through them.

Consider the giraffe women in Thailand for instance; for cultural reasons, they modify their bodies so that they can show their affiliation with their social group. According to Robert Roaf (1961), the neck is not growing; instead, the shoulders are pushed down – the clavicle will sag under the weight of the rings. This is how giraffe women from Thailand shape their bodies.

In order to reflect on the importance of pedagogy in mediating perceptions of what constitutes bodies that are healthy, disciplined, and balanced, we utilized images as characteristics of a heuristic relating to mindfulness and the body. The images depicted *body art* and *body modification*, with changes in the body ranging

Figure 2. Giraffe women from Thailand
Source: Blog – Ajmatosgouveia, accessible at:
http://ajmatosgouveia.blogspot.com.br/2009/03/mulher-girafa.html

from paintings and tattoos to self-mutilation, flagellation, use of subdermal and other implants. The selected images were intended to catalyse changes in social action, serving as a powerful stimulus to accept that bodies are modified because of their owners' desire as privileged means of expression – using François Pluchart's words, "to expose determinism, taboos, obstacles to freedom and individuals' freedom of speech" (Pluchart, 2000, p. 219).

Figure 3. Human face
Source: Materia incognita, accessible at: http://www.materiaincognita.com.br/mulher-vampiro-e-a-lady-gaga-da-tatuagem-radical/#axzz2YfWqDGHt

In the field of art, we seek the representation of perception, attention, and creative imagination of human bodies by several artists. We understand art as an expression of human feelings as well as of reason and reflection, which makes it possible to grant meaning to the language, to our experiences, and to the living world. Having art as a starting point, we encounter the possibility to work with human subjectivity. Such work contributes to the construction of cultural identity and a more conscious society.

Tarsila do Amaral's painting Abaporu inaugurates the "Antropofágico" movement in the visual arts. This movement was proposed to digest foreign art and culture and adapt these elements to Brazilian culture. Abaporu was created with disproportionate dimensions, with large hands and legs to enhance the workforce struggle which most of the workers of the country endured. Despite the limbs' proportion, we realize that the head is much smaller, showing the undervalued intellectual work at that time.

The statue by Alison Lapper, raised in Trafalgar Square London, was also chosen as an image for this work. This statue is a very powerful symbol because it draws attention to many taboos. This statue, which depicts pregnancy, nudity, and disability, was an award winner and sits in one of the busiest places in inner city London where many thousands of people have visited since 2008. Lapper's statue focuses attention on our values about the body – an embodiment that is materialized in the statue and functions heuristically to create a state of mindfulness. At first glance, the statue shocks many viewers, who object "… because it's brought up their prejudices." However, as pointed out by Lapper, the statue invites viewers "to become more comfortable with their own bodies because, I can tell you, it's a great feeling" (Lapper, 2006, p. 245).

Immersed in discussion about the differences between bodies, we also consider it relevant to reflect on the child's body. In an adult-centered society, the child is aware of differences. Children act, think, manifest, internalize, and appreciate the world around them differently from adults. In relation to young humans, Figure 6 invites the question: Is the fetus a human body?

Finally, in Figure 7 we contrast various bodies marked by cultural and biological expressions present in everyday life and art, with the static, perfect, White, and male body present in most textbooks.

The heuristic (i.e., the presentation) ended with the following question: What is the human body after all?

Motivated by this question, the presentation, and readings, the next step was an online discussion forum. The forum mediator tried to lead participants to consider how education can potentially transform body types as a way to discuss the course content in the early years of elementary school. To do so, the forum mediator raised questions such as: How are body experiences in different educational practices experienced? How is sexuality in childhood seen, especially in schools? Television and newspaper stands often display pictures of nude and half-nude bodies. What

Figure 4. Abapuro, Tarsila do Amaral
Source: Tarsila do Amaral official site, http://tarsiladoamaral.com.br/obras/antropofagica-1928–1930/ visualised in July 09, 2014

assumptions about sexuality do you believe that children associate with these images?

In courses offered through a virtual collaborative learning environment, the online forum can be defined as a space for discussion of topics proposed by participants. In the interaction promoted in this space, each participant submits his/her contributions to critique, and consequently, based on group intervention, each thread adds

Figure 5. Statue of Alison Lapper, Trafalgar Square, London
Source: Ablersite, accessible at: http://ablersite.org/2011/05/24/alison-lapper-pregnant/

new perspectives to their knowledge about the subject as well as integrates new arguments and reflections on what has been discussed.

The goal of the activity was to engage teachers in discussion about the importance of the body as a representation of culture, which is analogous to culture

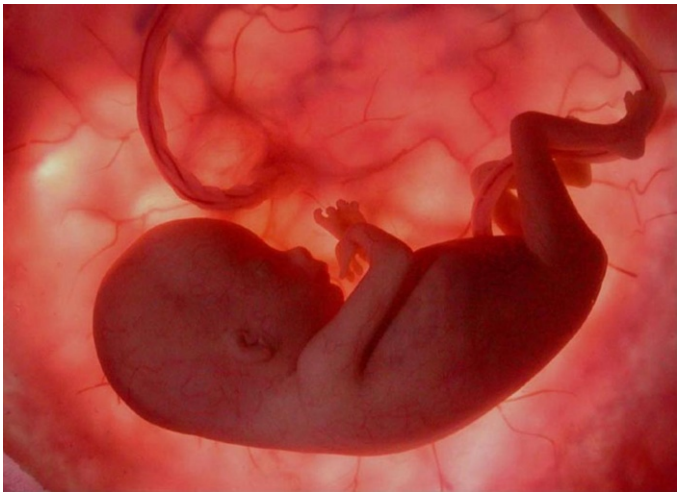

Figure 6. Human fetus
Source: Beta positivo, accessible at: http://www.betapositivo.com.br/2013/03/afeto-para-o-feto-por-dioclecio-campos-junior/

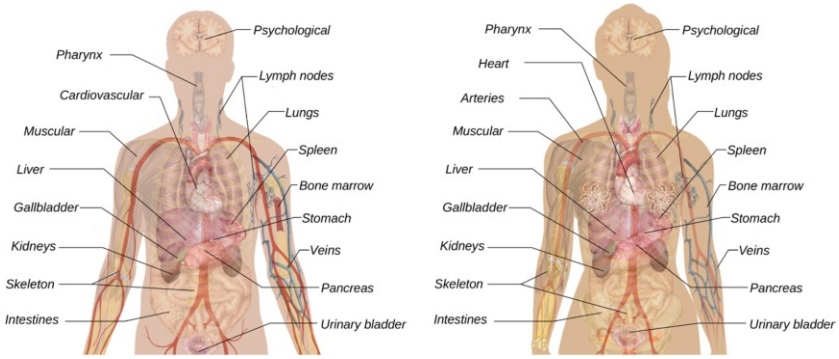

Figure 7. Human body as depicted in a text book
Source: Pixabay. accessible at: https://pixabay.com/pt/homem-mulher-esquema-corpo-144378/

printed on human bodies. That is, the conversation extended beyond the biological body. The goal of this research was to identify through the teachers' testimonials the initial conceptions, development, and awareness of the automated and instinctive mechanisms that reduce the biological body size and exclude its social nature. Becoming aware of these automated and instinctive mechanisms that are silently learned is a step toward the emancipation and improvement for the studied theme in the school environment. Even though sheer awareness is important, it is not enough

to accept differences towards the suspension of judgment and compassion in the sense previously discussed. Several studies have been devoted to understanding the ways emotions arise and how they impact our individual and collective wellbeing (Davidson & Begley, 2012). Some of them link the individual and collective wellbeing to the idea of mindfulness as the expression of a state of consciousness in which we become aware of several ways to react emotionally and physically to the different situations we face in everyday life.

The set of six characteristics that indicate the mindfulness state of consciousness may be defined as awareness, focus, compassion, acceptance of differences (or non-judgment), detachment, and ethics (Tobin & Ritchie, 2012). It is important to emphasize that these features are included in a personal development project for which each individual is at a different stage. Some of the participants in the project may have developed awareness, but may still be unwilling to embrace differences or detachment. The first analysis of the material obtained from the online forum showed that many teachers exceeded the sheer magnitude of awareness; they demonstrated the attitudes and behaviors that indicate other states of consciousness listed above. Thus, what we intend to analyze are indicators of personal development that these teachers had while they attended an activity focused on the topic of the body. Initially the focus was not on developing a state of mindfulness through the uses of body images – serving the role of characteristics of a heuristic.

THE BODY IN ART, EVERYDAY LIFE AND THE TEXTBOOK: THE TEACHERS' CONCEPTIONS

The forum facilitated the discussion of important aspects of the subject of "body": the idea of the body as a biological concept, but also as a cultural one. Furthermore, it showed the importance of the school in allowing children to have interaction with different bodies and learn how to recognize these bodies and respect them, as we can see in a teacher's testimonial:

> … In watching the slides I have reflected that the bodies are marked in ways that distinguish one person from another. (…) These images are great to start a project with the human body as a theme. It is possible to problematize because these are images that make us reflect on the several conceptions that we could have about the body. We may go further in interdisciplinary work. (Olivia)

Of particular importance in the above excerpt is that the teacher uses the term "reflection" twice, with the clear intention of showing awareness of something that was hidden from her perception. Later on, the same teacher showed that, besides awareness, she realized that there is a hierarchy that leads to judgment while watching the school presentation about the body. The following passage indicates this:

> When I saw the slide presentation, I thought about what exactly we see and what we pass to our students—a reflection that bodies only exist in the way

> they are presented in textbooks, we do not stop to think that there are other types of bodies and we have to introduce our students to the reality that there is no universal perfect perfect body"… we need to rethink when teaching about the human body. (Teacher Olivia)

During the forum activity, we realized how the presentation with the images touched the participants, as it lead teachers to think deeply of their own teaching practices and personal behavior. It also allowed them to think about their body conception and how they promote a judgmental attitude towards others. The previous and the following testimonials reinforce these reflections:

> In checking the images, I wondered, "Am I also telling my students what is normal in our culture? What is perfect or ideal to them?" [*judgment*] (Sofia)

> Certainly when I will be working with my students, I will explore this issue in a different manner from the way I have been doing before [awareness]. I had already worked with artwork, with images of textbooks, approaching the differences such as weight, height, race. But I did not explore the body "in everyday life." People that have bodies without limbs, mutilated, tattooed, with reamers, pierced ones, with small feet, long necks, etc. [*acceptance of differences*]. (Jessica)

> The presented text and images also made me reflect on my practices [*awareness*] related to the theme. I will surely approach the human body with another look by showing the differences and varieties cited in the text and, of course, by being careful (…) concerning the available material and the models and standards [*non-judgmental*] and the inclusion of discussion at times. (Lara)

The previous three testimonies demonstrate awareness, non-judgment, and acceptance of differences. In the following paragraph a new element is presented: the idea of compassion in the sense presented in the above excerpt by the Dalai Lama.

> As I read the text and watched the slide presentation, when teaching about the human body, I had never thought about people who do not have an arm or a leg [*compassion*]. Really, the textbooks and the media always show perfect bodies as if they were all perfect. After reading this I could see how it is possible to be more inclusive in what we do in a school context [*acceptance of differences*] if the textbooks segregate such unique bodies. (Alice)

In the beginning of the sentence, the teacher, gives the impression of a simple awareness, "… never thought about people…" but she goes a step further when she concludes, "… who do not have an arm or a leg." It seems to be clear that she started thinking of disabled bodies. It is an example of active thinking, as she became able to put herself in another's body; later on she manifested understanding of how to work the theme of inclusion that indicates the acceptance and integration of differences.

The slide presentation makes teachers sensible to the theme, allowing them to reflect on the teaching work, their vision of the body and the necessity of an examination of their own practice. They show the need to present the reality (the body in everyday life) to students; i.e., the body "without limbs, mutilated, tattooed, with reamers, pierced with small feet, long necks, etc." Other teachers highlighted the need for attention during the process of making materials available to children.

The body and sexuality were also discussed. The teachers reported their difficulties with the theme by recognizing that they are not able to approach the theme with the children and their families. One teacher reported an experience in which it was necessary to hold a parents' meeting and to explain that there is no "class on sex" for their children, but children's inquiries motivated by watching soap operas and by listening to songs were being answered in some classes. Again more signs of awareness are shown here, as seen in the following teacher's testimonial. The teacher realized that she was unprepared to deal with the sexuality issue with children:

> All the project's themes were about the human body, and in our conversations, questions related to sexuality were always present. I confess that many questions blushed me, then I realized how unprepared I was to deal with these situations [*awareness*]. (Nicole)

Taboos and controversies surround the topic of sex in school. Some do not acknowledge that prejudice about bodies is a source of social violence for many students. Others, like teacher Nicole, find themselves unprepared to deal with it. But it is interesting that addressing the topic of sex with children is directly reflected in the families. The act of demonstrating to the families that the decision to approach the topic of sex is made with consideration for the children's benefit reflects more than an ethical stand, but true ethical awareness. This is because there is difficulty for families to understand that even very young children have bodies that feel and are stimulated by other children's bodies, and they are also influenced by the information and behavior patterns of the adult world they experience. To discuss the need to treat the subject of sex in school is a complex matter.

One teacher talked about the school's responsibility regarding songs and kinky dances, by illustrating with his work on urban tribes and street dance that featured behavior research, clothing, and ways of thinking – culminating in a presentation in which costumes were decided collectively based on what would be the most convenient for the school environment. Ethical awareness allows people to adopt caring standards for each other that would go unnoticed. The italicized phrase in Isabela's comments below shows this state of perception.

> I see these songs and kinky dances as matters of high responsibility for the school while children are present therein. As educators we must *take the utmost care in order to introduce activities that involve dances. Children bring their habits from home so naturally, as parents and family members encourage*

> *their children to do so*. The trend nowadays defines the rules, starting from the way many people dress. (Isabela)

The issue of physical disability was very frequent in the discussions, highlighting teachers' difficulties regarding the way in which inclusion is being implemented in Brazil and the system's inability to appropriately educate children to be mindful about body representations. One of the teachers, however, went further in this discussion by relating how we express ourselves through our bodies and comparing communications that are based on the look of many disabled people (the body that speaks) with how the school is organized only to accept certain types of bodies as normal – there being no room for collective acceptance of differences. Another teacher presented as an example the game of dodge ball, and how it can be used as an awareness exercise for putting yourself in the other's shoes [compassion], but also as a strategy of adaptation of the activities to embrace different bodies involved in the game.

One of the teachers (Mariana) spoke about inclusion by referring not only to disability, but also the Red Indian, the Black, the poor, the maimed, and the tattooed, among other "different bodies." Such a comment led to an argument that the difference (and not being the same) should be the starting point of school work, since we could not face a class of children as homogeneous, since every child has his or her particularities, and we know that differences enrich the school environment and the classroom. Valuing differences means breaking ties with the bad attitudes and biased speech, but mostly to overcome the consciousness that we are or at least should be equal.

What matters is to overcome the idea that we are all the same or we should be equal and value our differences. Valuing differences involves departing from the biased discourses and negative attitudes.

In addition, we notice that the forum activity with photos and images was able to trigger insights and engage participants in lively discussions, and it also made teachers aware about the differences in the bodies and the several levels of consciousness necessary to deal with this subject in school. Teachers' manifestations showed evidence of development of a broader state of consciousness where compassion, acceptance of differences and ethics have become part of their way of being in this world. The images played an important role in triggering this process that the teachers have learned through their non-rational being. The experience allowed teachers to wonder about their own prejudices, either in their behavior, or in their way of thinking and assessment, but mostly in the form of standing towards others.

FINAL CONSIDERATIONS

The theme of human body was presented in a way that could have a deep impact on the participants and then lead them to achieve awareness of the subject. On the

other hand, most of the teachers' comments were in the field of personal experiences and were closely related to disability, an important subject that they are not always ready to respond to while in the classroom. The teachers provided significant examples and ideas on what the school may contribute towards the discussion of the subject beyond a biological body, thus avoiding the reproduction of stereotypes built by the consumerist mass media.

The approach based in the human body helps children to have access to different bodies while learning to recognize and respect them. On one hand we must consider that pedagogy had (and still has) an important role in controlling the bodies in order to discipline and keep them healthy in a universal sense. On the other hand, a movement of individualization has been developed, with a growing demand for taking care of diverse body types. This pedagogical approach implies the search for a standardized body, which may lead to undermining self-esteem that not all youths are able to overcome. This source of bitterness often induces identification with bodies that cannot be achieved by everyone. The outcome includes frustration, low self-esteem, and isolation among youth who could be happier and enjoy states of physical and mental wellbeing if they had had the opportunity to value the diversity of bodies that are available in the world.

It is necessary to reflect on the attitudes and representations in the school about cultural diversity, differences, and gender issues, as children incorporate rules, values, norms, and beliefs that reflect social roles. Such an emancipatory curriculum embraces identities, since the children carry in their bodies the signs of their relationship with the world in which they live.

The idea of an emancipatory curriculum brings the reflection that leads us to accept bodies in all their differences. However, the reflection in this case can overcome aspects of the bodies' differences and extend to the way in which teachers become aware of their judgments and practices. In the study presented in this chapter, teachers were able to notice the reductionist way in which bodies are treated at school, and they also went beyond self-awareness and walked through the door that we frame as mindfulness. The acceptance of differences, the non-judgmental disposition, and compassionate and ethical behavior were highlighted in some teachers' comments. We believe that *it is essential to cultivate these mindfulness characteristics for they may be associated with change in a pedagogical approach*; they also establish a new relationship with individuals in general. Our body is "a business card" in the sense it is the first source to engage social interactions. We have to avoid stereotypes and cultivate an open-minded approach to accepting differences.

Being aware of the diversity of bodies and learning how to work with this theme at school involves teachers developing a state of mindfulness. The activity utilizing images presented here shows us one possibility of developing such a state in teachers of child education as related to the body theme. One possibility would be to use images as heuristics, like those discussed by Powietrzynska (2015). Although heuristics rely on a survey format and include characteristics as assertions, it would be possible to think of a heuristic that uses images as a means

of bringing to awareness features of a specific social construct. This idea emerged during a session about mindfulness in the USER-S seminar organized by Ken Tobin at the Urban Education Program, Graduate Center of the City University of New York. Helen Kwah was one of the people I (Maurício) remember to have suggested the use of images as heuristics.

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9. LAST CHILD IN THE WOODS

An Analysis of Nature, Child, and Time through a Lens of Eco-Mindfulness

ABSTRACT

With the publication of *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder* in 2005, Richard Louv introduced the term "nature-deficit disorder" and illuminated children's physical, mental, and spiritual need for nature. As the term is not a clinical one and refers to aspects of human existence that are difficult to define, determination of its fortitude is complicated as well. In an attempt to objectify aspects of meaning embodied by the term, three assumptions underlying its construct are critiqued here on the criteria of believability, authoritativeness, logicalness, validity, emotionality, speculativeness, masking by neutrality/objectivity, and applicability for science teaching practice. After analysis, findings within particular criteria remain subjective, serving as possible support that there are aspects of humanity and nature that are inexplicable or have explanations yet to be decided. In spite of this, the construct of nature-deficit disorder serves as a guideline reminding caregivers and educators of the importance of the outdoors in child development. Realization of this importance can be described as the development of eco-mindfulness. In this chapter we analyze nature-deficit disorder and introduce eco-mindfulness as a remedy.

Keywords: nature-deficit disorder, nature, child, time, eco-mindfulness, science teaching practice

NATURE-DEFICIT DISORDER

"Nature-deficit disorder," an idea first coined by Richard Louv (2008), is not a term recognized in the medical field but one understood by many parents and educators by definition as is evident in the many interviews referenced in his book *Last Child in the Wood: Saving our Children from Nature-Deficit Disorder.* Louv uses the term to "describe the human costs of alienation from nature, among them: diminished use of senses, attention difficulties, and higher rates of physical and emotional illnesses." According to Louv, "the disorder can be detected in individuals,

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 135–158.

families, and communities" and it affects human behaviors, relationships, and the future of natural abundance (p. 36). Louv presents the recent increase of time spent by youth inside with electronic entertainment devices, such as television, video games, and cell phones, and the resulting decrease in time spent outside as the greatest evidence for a decline in health among children. In addition he provides anecdotal and empirical evidence of the benefits of nature therapy on clinical disorders, such as attention deficit hyperactivity disorder (ADHD) as support for the need for more time outside, and describes increased test scores among students of environmental schools and greater creativity among youth who are allowed to engage in unstructured play outdoors. According to Louv, these evidences are all connected by the choices made in how to spend one's time and in the value placed on nature. To Louv's list of evidences, we add *eco-mindedness*. There will be more on eco-mindedness later in this chapter, but in short, it is an awareness of one's relationship with the rest of the world, or a consciousness that keeps the earth in mind. These evidences and benefits from being in nature are intertwined, as are three assumptions that we found to be most compelling underlying Louv's notion of "nature-deficit disorder."

By assumption, we are referring to a concept or notion set forth by the author in a manner the reader is assumed to understand. The first most compelling assumption of Louv's nature-deficit disorder is his definition of nature. We give this assumption the title of Nature. We entitle the second assumption to be examined Child after the central focus of this book. The third assumption we call Time because of Louv's recurring use of time. Each of these three assumptions will be critiqued according to the eight criteria listed as follows: believability, authoritativeness, logicalness, validity, emotionality, speculativeness, masking by standards of neutrality/objectivity, and applicability for formal/informal science teaching practice. Analysis of these three assumptions will be made through a lens of eco-mindfulness.

ECO-MINDFULNESS AS A LENS

Mindfulness has been defined as a "set of skills that can be learned and practiced" (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006, p. 27). With roots in Buddhist tradition, mindfulness is a recent movement in science teacher education that is thought to reduce stress and increase attention and self-regulation. Eco-mindfulness joins mindfulness with ecojustice theory, which is based in an understanding that we are integrally connected with our environment through complex interactions (Martusewicz, Lupinacci, & Schnakenberg, 2010). Eco-mindfulness can thus be described as a set of skills that can be developed and practiced formally or informally by people through their experiences in and with their environment.

Powietrzynska, Tobin and Alexakos' (2015) heuristic description of mindfulness includes various characteristics of interacting with one's surroundings such as observation, awareness, and reactivity with our connectedness to emotion playing a central role. These characteristics of mindfulness can be adapted to

describe eco-mindfulness as consisting of environmental intuition, connectedness, self-awareness, social awareness, positive attitude, and environmental agency.

Environmental intuition is the ability of a person to perceive and react appropriately to one's surroundings. Connectedness describes an awareness of what is going on, in say a classroom, and how it relates to other areas of one's life, such as one's neighborhood or community. Self-awareness is an ability to relate physical conditions with emotions. Attention refers to how focused a person is on a task when outdoors. Environmental agency is a feeling of responsibility to act to protect an aspect of the environment. Louv's assumptions of Nature, Child and Time are analyzed in the eight criteria of believability, authoritativeness, logicalness, validity, emotionality, speculativeness, masking by standards of neutrality/objectivity, and applicability for formal/informal science teaching practice with the characteristics of eco-mindfulness in mind.

AN ANALYSIS OF NATURE

Nature is a broad topic with many meanings. It can refer to one's character or genetic make-up, or it can refer to one's environment. If referring to environment, further definition is usually required for in depth conversation. For example, if we were to speak of the "wonders of nature," are we talking about the entire physical universe or are we talking about wilderness? Can anywhere outdoors be considered nature or must it be pristine? Is being outside in a city considered to be the same as being outside in the country? Does breathing air count as being in nature? Are humans part of nature or outside of it?

As we recently have become interested in the topic of nature and involved in conversations about the term, we have noticed that usually one of the first questions we are asked is, "What do you mean by 'nature'?" We now ask that of Louv. What does he mean by "nature"? It is Louv's definition of nature, or lack thereof, that is, to us, the most compelling assumption underlying nature-deficit disorder.

Louv never defines the nature he is referring to *per se,* but it becomes obvious that he means the nature that is found outdoors regardless of setting: urban or rural; canyon, beach, or forest; walking down a road or rafting down a river; in a country back yard or on a city rooftop. He includes examples of all, and while he writes that "a book written for everyone is a book written for no one" (2008, p. 155), he does a good job of including the perspectives of many in regards to the nature that is experienced outdoors. This extensive inclusiveness of Louv's definition of nature helps make his message reach a larger audience.

There is more to the nature of nature-deficit disorder than a location, however. It is the feeling that one has outdoors in nature that makes nature special. Louv repeatedly refers to this as transcendence or a sense of freedom. Hence, nature-deficit disorder refers to the Nature that is missing, not the nature that is everywhere. While Louv makes clear that simply going outside is a fine start to healing the "disorder," he argues that eliminating the deficit requires a meaningful interaction

between person and nature, or as John Dewey would describe it, an *experience,* the measure of value provided by "continuity and interaction in their active union" (Dewey, 1938, p. 43). Louv does not delineate between nature as everything outdoors and nature as *experience* outdoors. He instead includes both in a lump sum application of the word "nature." Nature-as-*experience*-outdoors is one definition of nature that will allow its continuation into the future. This definition will be referred to as Nature and will be the definition used for the purposes of this section and the rest of this chapter.

Is Louv's assumption of Nature believable? Drawing on our own experiences as science educators, we know that young people today do go outside, although, just as Louv laments, not in the same way that we remember. They do not know what they are missing, and that is what this book is about – restoring experiences in nature such as those that we, the older generation reading this book, remember. *Experiences* do not occur every time we step foot outdoors, and they do not happen immediately. They take time and willingness.

According to Rachel Carson, this also takes a mentor. "If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it" (Carson, 1965, p. 55). Louise Chawla (2006) echoes this by recognizing that the self-efficacy and sense of competency that is required for a child to love nature, begins with an adult role model. Drawing again from our own observations, the busy lifestyles of many people do not often allow time for experiences in nature. It is believable that nature-as-*experience*-outdoors, as we, the older generation remember it, is missing from the lives of young people today. This holds true even when we ask the question, "are humans part of nature or outside of it?" Experience in nature outdoors as we remember it can be missing from ourselves as well or at least the selves of the younger generation that has not experienced it. For the older generation, it is at least in our memories.

Is Louv's assumption of Nature authoritative? The authority associated with the idea of widespread nature-deficit disorder is evident in the popularity of the term itself and of the popularity of Louv's book that soon followed its introduction in 2005. One example is Greenfest, a local month-long celebration of Earth Day. Greenfest is merely one reaction in one town of an entire nation. The name of the event, "Get Outside!" emphasized the sense of urgency to tell others what they were missing. A few years following that Earth Day celebration, Louv spoke at a conference based on nature education. The auditorium was full in spite of the years that had passed. The lecture was timed with a re-release of Louv's book that included lists of actions to take, books to read, activities for kids, and goals for government. The many tips found in the new edition on how to proceed in adding nature into one's lifestyle, and the second release of the book itself, are responses to its overwhelming popularity. There is authority that comes with popularity and a fine paradoxical line between being enabled to experience freedom in nature and being told how-to.

Is Louv's assumption of Nature logical? "'[R]eality' is what existence would be if our reasonably justified preferences were so completely established in nature as to exhaust and define its entire being and thereby render search and struggle unnecessary" (Dewey, 1925, p. 54). Nature is reality. It is all encompassing, including all matter and energy. It is foundational to human physical existence and to the existence of all physical entities. Lack of nature would literally be a deficit of nature. However, as the elements of nature follow the laws of physics, nature itself cannot be at a deficit. We assume that the law of conservation of mass and the law of conservation of energy hold true when considering nature. Thus, a literal interpretation of nature-deficit disorder is not logical regardless of whether one is considering nature as everything outside of humans or including humans in it.

Nature-deficit disorder, however, refers to the lack of relationship, interaction, or experience with nature. Therefore, when considering that principles of logic are at the basis of all of our experiences (Swabey, 1930), nature-as-*experience*-outdoors is a logical premise for the assumption of the existence of nature-deficit disorder. Adding the premise of "as we, the older generation, remember it" to our developing definition of Nature strengthens the chain of logic.

"Memories are attributions that we make about our mental experiences based on their subjective qualities, our prior knowledge and beliefs, our motives and goals, and the social context." Hence, memory is a type of subconscious "reality monitoring" as opposed to the consciousness of reality (Johnson, 2006, p. 760). Memory and the reality of nature are difficult to compare, but memory itself is not in question. Because Louv provides many examples of similar memories, they collectively contribute to the strength of this premise.

Is Louv's assumption of Nature valid? "An argument is valid if it is impossible for the premises to be true and conclusion false (at the same time)" (Epstein, 2002, p. 17). Applying the assumed definition of nature as nature-as-*experience*-outdoors to the argument of "If children are lacking in nature, they are at risk for experiencing "nature-deficit disorder," we find validity, although perhaps informally. As with the chain of logic, the added premise of "as we, the older generation, remember it" strengthens the validity of the argument by adding support to the definition of nature.

Is Louv's assumption of Nature emotional? "Where will future stewards of nature come from?" (Louv, 2008, p. 146). Our kids are "containerized" (p. 35), and natural play has been "criminalized" (p. 239) because we are bound by the fear of liability. "As open space shrinks, overuse increases" (p. 30). "Today's children may be the first generation … to die at an earlier age than their parents" (p. 47). Louv's book is filled with poignant phrases that sum up the desperate state of nature and our atrophying relationship with it. The word "disorder" itself signifies a need for alarm.

These, along with the many testimonials of nature experiences from children and adults alike, work together to create a sense of urgency and a feeling of lamentation over what we have already lost. In the additional "Notes from the Field" added in the 2008 edition, Louv tells a story of a lecture attendee that shared

with the audience his fear that "he might belong to one of the last generations of Americans to feel [a] sense of ownership of land and nature," that he might be one of the last children in the woods, due to both a lack of care for nature and a lack of woods (p. 357).

Louv's (2008) entire book has an emotional tone. For those readers who love nature, as Louv clearly does, the thought of the loss of nature conjures the feeling of the loss of a large part of one's self. Hopes and plans of sharing this love with one's friends, children, and grandchildren become questionable. Not to mention, the words themselves are written in a manner that pull on our heartstrings. Consideration of the style of writing carries with it a contemplation of the audience. This book is written with emotion to urge people that care about nature to make choices for change. The focus on children makes it more than a complaint about environmental degradation. Instead, it appeals to a greater audience, getting the attention of those that care for children that have not considered making choices for the preservation of nature before.

Is Louv's assumption of Nature speculative? "Identity, in practice, is a way of being in the world, a layering of events and interpretations that inform one another and are produced from our participation in communal practices of lived experience" (Wenger, 1998). "If we examine children's identity as students relative to subject matter, there is development of a broader understanding that concerns not only the topic … but also a type of self-understanding involving practical involvement. In this way, meaning in [the subject matter] becomes tied to a child's sense of self" (Kozoll & Osborne, 2006, p. 34). One way of understanding this is that "the self is created in the very process of interaction with others and the environment … this view of self accounts for both a unity of self and the way we are fragmented and fluid" (p. 35). We each have our own identity and sense of self that changes with context, interactions with others, and experiences. The fluidity of self mirrors the fluidity of nature. Our one word "nature" with many meanings reflects this.

Additionally, a sense of self is defined by Others, meaning those who are different from self. Rajneesh (1988), also known as Osho, says that our first awareness upon birth is the Other. We learn what we are by learning what we are not. This sense of self is the ego, not the true self but a reflection of society. Osho describes the ego as a clearing in the forest from which one must venture into the wild beyond in order to find one's true self. There in the unknown and nameless will be found the self, the soul, and the spirit (Rajneesh, 1988). Louv refers to Gardner's (1983) theory of multiple intelligences and the recent addition of naturalist intelligence or "nature smart" (Louv, 2008, p. 72). Louv is "nature smart" as we assume are many readers of the book. Based on the research of Santostefano (2008) that is founded in the theory of Heidegger (1962) that each individual is a holistic organization of self and environment, another way of describing a person who is nature smart is someone with a more *integrated nature-self* or, in other words, a sense of self that is one with nature or has developed with and by incorporating outdoor nature. This person could also be described as eco-mindful.

Stemming from these connections, Louv's ideas can be interpreted as meaning more outdoor nature experiences can lead to a greater number of young people whose selves have deeper integration with outdoor nature, leading to increased care of the natural environment in the future. Likewise, lesser outdoor nature in self-development can be understood as nature-deficit.

There is research in the area of psychology supporting connections between Nature, self, and attitudes toward environmental issues. For example, Schultz and Tabanico (2007) describe the development of identity in the environment through time spent outdoors, and Milton and Cleveland (1995) define similar developments through specific outdoor experiences. Duffy and Verges (2010) document effects of meteorological and seasonal events on perceptions of nature, and Bruni and Schultz (2009) assess implicit beliefs about nature among youth. In spite of the research, the attachment of the unofficial term nature-deficit disorder to the issue that Louv perceives can be viewed as speculative with little foundation.

Is Louv's assumption of Nature hidden behind standards of neutrality/objectivity? We have proposed that the definition of nature implied by Louv is more like nature-as-*experience*-outdoors. Rather than this representing an example of hiding behind standards of neutrality or objectivity, we suggest that by simply using nature to refer to the many possible experiences that one may have outdoors, Louv makes his book easier to understand to more people. As the emotion expressed and evoked by Louv's writing gives the impression that he is intending to pass along a message to as many people as possible, use of one simple term serves his purpose well. In addition to simplifying comprehension, the use of nature alone contributes to the style, flow, and overall reading experience.

Is Louv's assumption of Nature applicable for science teaching practice? "*Experience* in nature" is difficult to define as an overarching term because each experience is specific to the individual experiencer/experience. To experience nature in a manner that allows transcendence or a feeling of freedom enables one to *know* nature. Because of the variability of experience, one's definition of nature varies as well. What matters most for the applicability of the assumption of nature as it applies to nature-deficit disorder and science teaching practice is to enable the opportunity for *experience* in nature. Educators that are willing to allow time for free exploration and provide mentorship in the outdoors will better facilitate an active union of child and nature. In addition, it is important for science educators to be sensitive to the various views of nature that students bring to and develop in the classroom. For example, one group of education researchers and curriculum developers collaborating to study student perceptions of nature found that promoting a pluralistic view of nature better enables profound and meaningful development of environmental attitudes to guide behaviors (Lijmbach et al., 2002). Incorporating an approach of acceptance of differences also builds communication and decision-making skills. These skills are important in science education and also in the integration of nature with one's identity or sense of self. This can otherwise be thought of as becoming eco-mindful through an increased realization

of connectedness to the environment, including attentiveness and intuition, and also through the development of self and social awareness – which leads us to our next assumption analysis, that of Child.

AN ANALYSIS OF CHILD

The next most compelling assumption underlying the notion of nature-deficit disorder is Child. This name serves as an umbrella term for three sub-assumptions related to the central focus of the book, children. The first sub-assumption is that we understand the child, and the development of the child, as entailing the *whole child,* including mind, body, and spirit. The second sub-assumption is that "we will do it for the children," or in other words, we will change our behaviors for the sake of the children. A third sub-assumption is that children are in peril and that this is due to adult behaviors that do not model for children how to behave in a manner that considers or even notices nature. With this there is a connection that not only is the future of children at stake, but the future of childhood as we know/knew it. Furthermore, if the child symbolizes the future, the future itself is in peril if we do not change our behaviors by enabling children to have experiences in nature. Thus, the second main assumption to be examined is that of the Child, meaning the whole child, children in general, as well as the concept of childhood, and the future as it is associated with children, is at risk for experiencing nature-deficit disorder. As with Nature, referring to the many possibilities of nature-as-*experience*-outdoors, Child will be critiqued in terms of eight criteria.

Is Louv's assumption of Child believable? Louv supports his notion of nature-deficit disorder by presenting information showing a decline in child health over the past few decades. It is evident that his consideration is of the *whole child,* meaning not only the academic development and health of the mind, or physical development and health of the body, but also the development of and health of the spirit of a child. The prevalence of data makes this assumption of the Child needing to be saved believable.

Louv depicts the recent decline in child health with statistics such as, "according to [Center for Disease Control] CDC data, the U.S. population of overweight children between ages two and five increased by almost 36 percent from 1989 to 1999" and "approximately 60 percent of obese children ages five to ten have at least one cardiovascular disease risk factor" (2008, p. 47). He correlates this with an increase of time spent with technological entertainment rather than time spent in nature with evidence such as, "children ages six to eleven spend about thirty hours a week looking at a TV or computer monitor," and "the CDC found that the amount of TV that children watch directly correlates with measures of body fat" (p. 47).

Louv provides support for the beneficial effects of time in nature on ADHD, a mental and behavioral disorder, with statements such as, "some researchers now recommend that parents and educators make available more nature experiences-especially green places – to children with ADHD" (2008, p. 100). He presents

evidence of the benefits on mental development of children in environmental schools with, "96 percent of students meet or exceed state standards for math problem-solving – compared to only 65 percent of eighth-graders at comparable middle schools," and reports of "a 27 percent increase in measured mastery of science concepts; enhanced cooperation and conflict resolution skills, gains in self-esteem, problem-solving, motivation to learn, and classroom behavior" among at-risk elementary students engaged in outdoor education programs (p. 208). In addition, children allowed to play among natural elements "used more fantasy play, and their social standing became based less on physical abilities and more on language skills, creativity, and inventiveness" (Louv, 2008, p. 88).

Experience in nature is difficult to define as spiritual, yet its importance is realized in the maintenance of a healthy whole child balance. Louv finds support for time in nature for the spiritual development of the whole child in the work of William James. Considered the founder of American psychology, his interests in religious experience and nature's influence on cognition and attention link nature and spirituality, although not specifically among children. More support is found in the work of several influential poets, such as Blake and Wordsworth, and psychologists, such as Freud and Jung, showing the prevalent consideration of the child's perspective of nature and its meaning in the understanding of the psyche of the child. These early psychologists do not venture into spirituality. This is ironic for while "psychology" is understood to mean the "study of the mind," a Greek meaning for "psyche" is "soul" or "spirit."

Louv cites Edward Hoffman who, through interviews with children and adults, bridges psychology, the child, and spirituality to establish a view that "even small children grappled with questions of a spiritual nature" (2008, p. 293) and that "exalted or transcendent experiences are possible during childhood" and that "most transcendent experiences happen in nature" (p. 294). Spiritual education, specifically addressing the education of the human spirit is a slowly growing area in the field of education. It fosters "a sense of wonder, peace, joy, hope, love, sensitivity and creativity, as well as the nurturing of a deeper sense of identity, the development of responsibility, community, and belonging" (King, 2010, p. 251). A form of global education, it is considered timely for whole child/whole person development: "after extending the power of our hands with incredible radio and sonar, our brains with computers and automation, we must now also extend our hearts, our feelings, our love, and our soul" (Muller, 1982, p. 8).

Louv includes his own interviews with children and adults regarding their experiences in nature. For example, Louv relays the words of environmentalist Janet Fout who, "as a child, found unfettered joy in nature and still connect[s] with [her] deepest joy beside a flowing stream or beneath a canopy of stars" (2008, p. 295). Because the "disorder" is based on observations of decline in the health of the whole child, written accounts such as this, reminding readers of their own observations, serve as evidence in establishing a factor of believability of the

integral part that the Child plays in the construct of nature-deficit disorder, that loss of time in Nature leads to loss of the Child.

Is Louv's assumption of Child authoritative? Speaking from our own experiences, teaching involves aspects of guilt and uncertainty, for one is never quite certain if the most appropriate choice or action has been made. Although the job of teaching becomes more familiar with time and experience, each child in our care is different. Teachers draw from their own experiences as children to inform their role as educators.

As is discovered when reflecting on any job, changes would be made if the possibility arose to repeat a particular situation. The job of teaching is no different. Although the focus of Louv's book is the Child, it is actually the actions of their caregivers that are in question. One blatant message that can be gleaned from the book based in quotes such as, "today's kids are the sorriest generation in the history of the United States" (2008, p. 11) is that we, of "Generation M – for multitasking" (p. 119), could improve at teaching.

Louv points out the many opportunities for the development of a more integrated nature-self that are missed by children and their adults, chances to "establish a self beyond adult control" (2008, p. 124) are lost when children are over-scheduled in organized sports and allowed to spend any unstructured time playing video games. He also gives several examples of parents portraying the outdoors as dangerous, thus endorsing the separation of Child and Nature.

Of organizations such as Boy and Girl Scouts, Louv writes, "Americans expect these, institutions to do more of society's heavy lifting – more of its social, moral, and political juggling" (2008, p. 155) due to the decline in family time. In addition, there is a sense of urgency that we need to act now, that not only must we act to save the Child but to save Nature as well. The "endangered indicator species" is the child in nature (p. 159). This sense of urgency, along with criticisms of parenting, conveys a feeling of authoritativeness.

Is Louv's assumption of Child logical? The second assumption of nature-deficit disorder can be summarized as the following: the Child is at risk for experiencing nature-deficit disorder. In order to see this as a logical argument, first one must understand the conditions of nature-deficit disorder as an observed decline in health of children assumed to be due to the trade of time spent in nature outdoors for time spent with electronics and organized sports. Adding the phrase "based on the research data" adds strength to the chain of logic. Adding the conditional of "if he or she does not experience nature outdoors" strengthens the argument as well (while also contributing to an authoritative tone). However, when this conditional is intended to apply to all children, or childhood in general, and thus rewritten with "they" instead of "he or she," the argument is weakened, for referring to a large, diverse group in a general fashion leaves much to possibility (Epstein, 2002).

It has been written that the concept of "nature merely serves as a mirror onto which societies project the ideal reflections they wish to see" (Cronon, 1996, p. 36). The views of this book are based on Louv's perspective of nature and that

of others that agree with him. Some see children as hybrids of nature and society. They are "more social … than the hard parts of nature, but they are in no way the arbitrary receptacles of full-fledged society" (Tidmarsh, 2007). Perhaps Louv sees children as hybrids. He definitely sees them as integral to his ideal of Nature, for he recognizes that children are future voters and stewards of the Earth. He also sees them as carriers of ideals from the past to the future for he writes in *Childhood's Future,* "the topic of childhood seems to touch some deep chord in my generation: here is a challenge to which our idealism can once again rise" (1990, p. 7). By contrast, Louv's realization that there are many that feel the loss of the Child would be good for Nature is reflected in his projected outlook of staunch environmentalists: "we have met the enemy and it is our progeny" (2008, p. 147).

Many of us share a similar idea of general characteristics of a child – energetic, growing, seeking, and needing care and guidance. Yet, our own experiences as children enable us to recognize the specific individuality of each child. Because of the many different views of the Child that can be considered, despite the addition of premises and conditions, the variability of the second assumption keeps it from being logically strong. However, "mental images, including myths and metaphors, are more influential in how we see and act in the world than pure logic alone" (Eisenberg, 1998). The Child as a metaphor for childhood, the future, and even the ever-youthful energy of Nature transcends logic.

Is Louv's assumption of Child valid? Rewriting the second assumption complete with premise and conditional becomes: Based on the research data, the Child is at risk for experiencing nature-deficit disorder if he, she, or they does/do not experience nature outdoors. Following Epstein's rule for validity that we used for Nature, we find that the assumption is valid as long as nature-deficit disorder is understood to be a valid consequence of lack of experience in nature outdoors. The strength of validity is questionable, however, when considering the variability of nature-self that can occur among individuals. As there has yet to be a method developed for measuring exactly how much experience one may need in nature outdoors in order to not be "nature-deficit," and as this could only be measured by the individual of whom the nature-self is in question, and as the measurement would change from day to day, it is impossible to standardize this amount and generalize across a population. Nature is more of a feeling than a topical solution to a disorder.

One may apply a thought process similar to that used in determining the moral consideration of organisms by incorporating a biocentric environmental ethic to establish greater strength in validity. Recognizing that the individual organism has a "teleological (goal-oriented) center of life, pursuing its own good in its own unique way," one may warrant moral consideration on the basis of respect for life (Taylor, 1986, p. 45). Because of the interconnected nature of all living things, and their need for each other for survival, this respect can thus be extended to ecosystems, species populations, and life communities of which humans are members. Mueller (2009) explores the idea of extending moral consideration to abiotic factors as

well for their place in ecosystems. Applying biocentrism to what we recognize as characteristics of the healthy whole Child and considering the research data presented by Louv, we can rewrite the second assumption in a manner in which it is impossible for the conclusions to be false while the premises are true, so that it is valid and strong: Based on the research data, the Child is not at risk for experiencing nature-deficit disorder if he or she experiences nature outdoors.

Is Louv's assumption of Child emotional? The second assumption is laden with potential emotion. As Louv mentioned, "the topic of childhood seems to touch some deep chord" (1990, p. 7), and while he was referring specifically to his generation, his sentiments are applicable to any generation. Memories of youth bring feelings of nostalgia. Even if one's memories of childhood are not pleasant, there is a pleasant standard image of what it "should be" that is conjured up by the topic – images that are accompanied by feelings of innocence, care, love, belonging, and freedom.

It has been noticed that in response to perceived environmental decline, environmentalists "construct interpretations that integrate political, economic, and social perspectives with the psychological and spiritual process of widening the sense of self in respect to nature" (Thomashow, 1995, p. 53). Although Louv's care for Nature and Child are genuine, as is evident in his life's work of interviewing parents, teachers, and children on the topics of family time and nature experiences, his choice of Child as the focal point for the discussion carries with it an emotional aspect that perhaps has allowed his message of the need for increased environmental awareness through experience in nature outdoors to extend further than it would have without tapping into the common nostalgia of childhood. Incidentally, there is a new term recognizing the connection of ecosystem health and human health, *solistalgia,* or the homesickness experienced upon the loss or transformation of a loved environment (Albrecht, 2006).

In addition to Child serving as a vehicle for Louv's message, his incorporation of a body/health analogy further assists readers in internalizing his message. While health is individualistic, it is also a topic that we share. We understand this model for it is based in personal experience. Even if we have not experienced illness firsthand, we are able to feel sympathy for those we know of secondhand, and even by imagining those we do not know, that have experienced loss of health and loss of relationship. We know what it means to miss something or someone.

Is Louv's assumption of Child speculative? As mentioned earlier, there are aspects of the Child with which most of us identify. These aspects may vary, however, among the assumed intended audience of this book, caregivers of children, caregivers of nature, or caregivers of both. At first glance, the book's title gives a hint of speculation that the potential reader should be interested in "Saving Our Children" or that the use of Child is a vehicle for reaching more readers with an environmental message. While one does need to care about children to read this book, Louv makes the case for why one should.

As delineated in the sub-assumptions of the Child, children do not always represent one's progeny; they can also symbolize the future. When considering the future of the environment, it is important to realize the role that children will play in it. In addition, there is an inference throughout the book that the Child can also represent Nature. Physical allusions, such as "the new environment of childhood" (Louv, 1990, p. 5) and "the new landscape of childhood" (Louv, 2008, p. 11) support this connection as well as similar characteristics of energy, growth, and requiring care. Seeing these connections helps one see past speculation.

Louv writes that, "Until recently, most environmental organizations offered only token attention to children. Perhaps their lack of zeal stems from an unconscious ambivalence about children, who symbolize or represent overpopulation" (2008, p. 147). Generally speaking, he is saying that there are environmentalists who are not exactly proponents of children and that these readers tend to make choices for the future of the Earth. They overlook the Child in this future.

The People Who Hugged the Trees: An Environmental Folk Tale (Rose, 1990), tells a story of villagers in India who loved the trees like their children. When we extend our idea of children to incorporate all that the Child entails, including childhood, the future, and even nature, we see that the children are an integral part of our life community, just as adults are. In addition, it is important to realize that adults are suffering from nature-deficit disorder too.

Is Louv's assumption of Child hidden behind standards of neutrality/objectivity? Louv could go further into explanation of the connection of the Child and Nature. There is a great deal of research that explores the role that nature plays in the development of identity and defining one's sense of self. One example is Santo Stefano's work (2008) mentioned earlier in this chapter. He has found that there are three environments with which children develop embodied life-metaphors: other humans, nature, and inanimate objects. Children then build healthy psychological development and the holistic organization of self from these metaphors.

This research is important two fold. First, it explains the developmental process and the significant role that experience in nature plays. It also supports the push to educate parents, teachers, and caregivers of children on the need to create opportunities for experiences in nature outdoors, so that they may pass it on. Louv notes a drop off in camping among people younger than thirty and speculates that this is "possibly because no one took them camping when they were kids," hence they do not take their own kids (2008, p. 149). We know what we have experienced. Nature is no exception.

Through his descriptive narrations of his own nature experiences and those of others, Louv taps into the Nature that is within each of us. He also taps into the Child within each of us, drawing forth memories of our own childhood, of what we want for our children, for our community's children, for the future. The section title "The Nature-Child Reunion" depicts this connection. (It also brings to mind the metaphor of Mother and Child that will not be addressed here.) The deeply

embedded nature of the Child metaphor becomes evident as one completes the book. Child, like Nature also refers to Self.

Is Louv's assumption of Child applicable for science teaching practice? The assumption of Child is applicable to the interests of educators and to current trends in education and outside of it as well. Through our own experience, we observe increasing attention in the media placed on promoting healthier choices. The news is riddled with reports of increases in cases of diabetes and obesity among juveniles and adults alike. Television shows geared toward preschoolers instruct them in calisthenics and dance moves, and for the older audience, there are entire series that follow obese teens as they struggle to regain a healthy lifestyle and sense of identity. While schools highlight whole wheat items on the lunch menu, and physical education programs reinforce the need for exercise to balance caloric intake, the USDA-provided school lunches often, ironically, include high fructose corn syrup, an ingredient linked to diabetes and obesity, especially in children (Bray et al., 2004). The U.S. government's latest approach is the Let's Move campaign to educate children and adults about healthy eating and exercise (Wojcicki & Heyman, 2010). Schools are infused with "health crisis."

Mueller (2009) notes that crisis, particularly ecological crisis, is not necessarily the best motivator for change. Louv's writing illustrates this understanding also. Although he includes aspects of environmental crisis as a motivator for changes in behaviors toward the environment, it plays more of a supporting role to the central focus of saving our children from nature-deficit disorder. While he grabs our attention with words depicting a sense of urgency regarding a perceived health crisis, such as "saving our children," Louv (2008) steers clear of doom and despair by providing light on the horizon with multiple scenarios of what the future will look like with ideas such as "zoopolis" (p. 246), "reinventing the vacant lot" (p. 347), and "the fourth frontier" (p. 235).

Health crisis can be a teaching tool for learning science. It can also serve as a catalyst for self-realization or, in terms of eco-mindfulness, self-awareness. Becoming more aware of one's self or ourselves in a manner that honors the whole child concept entails an awareness of others as well. Developing self and social awareness goes hand-in-hand with fostering a positive attitude. In line with ecojustice theory, this level of awareness of self/others also includes species other than human and all factors biotic and abiotic necessary for survival. Awareness of this dimension involves eco-mindfulness in the form of environmental intuition and attention that potentially could lead to agency for others of all species. Louv's approach of nurturing the whole child and healthy ecosystems is an applicable method for science teaching practice that, although not as urgent as sounding the alarm of crisis, is more sustainable over time. That brings us to our third assumption.

AN ANALYSIS OF TIME

The third most compelling assumption of Louv's construct of nature-deficit disorder is Time. Throughout *Last Child in the Woods: Saving Our Children from*

Nature-deficit Disorder, Louv revisits memories of the past, conveys concerns of the present, such as lack of family time, and narrates futuristic visions. In the earlier chapters of his book, Louv conveys a compelling sense of urgency, as if time is running out. In the final chapters, Louv paints a vivid picture of the future that could be yet to come, as if we can "buy some time" by making sustainable adjustments to our lifestyles. In this manner, the reader is able to transcend to a "better" time by envisioning the benefits of choices made that promote the relationship of child and nature. In addition, timing, as well as a sense of urgency, is an aspect of Time that makes this a compelling assumption of nature-deficit disorder.

Is Louv's assumption of Time believable? It has been written that the biggest error made when trying to make change is to not create a high enough sense of urgency among enough people (Kotter, 2008). In addition, emotion, especially fear, serves as a motivator for action (Lopes, 1987). "Even when we are motivated by hope, the key emotion that inspires us to act with a sense of urgency is our fear of losing an opportunity [to achieve a hoped-for goal]" (Kroeger, 2004, p. 5). Furthermore, motivation for action is often based in identity, sensitive to and dynamically constructed in subconscious and situational cues and context (Oyserman, 2009).

Through word choice and presentation of personal accounts concerning topics that are close to the heart, nature and children, Louv (2008) creates a sense of urgency that is emotion laden. He sets the stage for hope for the future and fear of loss throughout the book. "In a few years, there will be nobody left to identify several major groups of marine organisms" (p. 143). "[P]assion is the long-distance fuel for the struggle to save what is left of our natural heritage" (p. 159). Words and phrases such as "these uncertain times" (p. 261), "saving," and "action," and "while it lasts" (p. 315) contribute to the tone of urgency as well. The sense of urgency to act now along with the emotional predilection of the reader for nature and children makes nature-deficit disorder believable with respect to time.

The timing of the book's first release in 2005 followed closely on the heels of the release of Morgan Spurlock's *Super Size Me,* a documentary film that brought America's attention to the ill-health effects of fast food, especially McDonald's, a favorite among youngsters. The media reporting of the film and reactions to it coincided with statistical reports of childhood obesity released by the Institute of Medicine in conjunction with the CDC (Institute of Medicine, 2005). The greater attention placed on nutrition and exercise that has followed in the education system and in the media set the stage for an audience hungry for the information of Louv's book regarding children's health. Thus, the timing of the book also contributes to the believability of nature-deficit disorder.

Is Louv's assumption of Time authoritative? The sense of urgency and the subsequent feeling of the need to "act now" support nature-deficit disorder in an authoritative manner, as if time is running out. "Children's Hospital and Regional Medical Center in Seattle maintains that each hour of TV watched per day by preschoolers increases by 10 percent the likelihood that they will develop

concentration problems and other symptoms of attention-deficit disorders by age seven" (Louv, 2008, p. 102). Warnings such as this bring to mind similar time-related statistics concerning environmental degradation and biodiversity loss such as "reduction in the area of tropical rain forest at the current rate can be expected to extinguish or doom to extinction about half a percent of the species in the forest per year" (Wilson, 1993, p. 276).

"Time is power, time and space" (Louv, 1990, p. 22). Louv relays through interviews the race for more time that is eminent in working world America. We spend more time working so that we may have time off; yet, somehow we end up spending the time off working. "Time in nature is not leisure time; it's an essential investment in our children's health" (Louv, 2008, p. 120). Even statements such as this, which have good intentions, still come across as authoritative and add meaning to nature-deficit disorder.

Is Louv's assumption of Time logical? Time is a compelling underlying assumption for nature-deficit disorder when used as a motivator for change. However, although it can be assumed that the majority of the readers of *Last Child in the Woods* understand time as events with temporal relationships that are perceived as being in the past, present, or future, there are different ways of perceiving time. For instance, in different cultures around the world, the perception of time can differ as being linear or cyclical; quantitative or qualitative; as an actual dimension that can be applied universally or as a method of representing events in a continuum with space. Some believe time to be only in the present, and some give all time across eternity equal status in reality (Bourne, 2006).

If we write the assumption to include detailed time periods, we make specific the concept of time to which we are referring and can create a strong chain of logic. For example, the assumption rewritten the following way provides a strong argument for the "disorder": On average, American children in the 1920s spent more hours of each day outdoors in nature than American children in 2011 do because there were more family farms, therefore many American children today could be described as having nature-deficit disorder. This is logical.

One way of perceiving time is as the past and the future existing only in the mind, leaving only the present as reality. Following this line of thinking, duration cannot be measured. The present as it is still occurring and has no end as yet to measure, and the past and future are not existent. Thus, temporal duration is a creation of the memory (St. Augustine, 1961). Expanding on the details of the present William James (1890) wrote, "The prototype of all conceived times is the specious present, the short duration of which we are immediately and incessantly sensible." In this definition, the present is objectified and characterized as having duration, although that duration is not specifically defined. Whether considered a universal unit or a representation of event, "Time must be brought to light – and genuinely conceived – as the horizon for all understanding of Being and for any way of interpreting it (Heidegger, 1962, p. 39).

If we consider the third assumption without specific event markers, then Time is not necessarily logical as an assumption. For instance, if the assumption is written as, 'children of today spend less time outdoors in nature than they did in the past, therefore many can be described as having nature-deficit disorder,' the argument is not as strong. There are cultural differences to think about when literally considering time, but also there are no details to serve as measurements making the statement subject to the nostalgia of memory and therefore, in a logical sense, considered subjective and weak.

Is Louv's assumption of Time valid? An argument is valid if it is impossible for its premises to be true and its conclusion to be false (Epstein, 2001). The manner in which an assumption is written, as a strong argument or as a weak statement, can influence its viability. Including specifics that allow the reader to comprehend time from the same perspective as the writer enables the reader to determine the possibility of the premise and conclusion always being true therefore increasing its viability. Additionally "standing the test of time" or evidence of longevity promotes viability of an assumption or an argument. However, viability does not determine validity when considering an undetermined scale of time. As there is not a unified theory of time as of yet, it is impossible to determine the validity of a general reference to time.

Some physicists question the existence of time altogether. It can be explained as an "invented placeholder for the things we value, not something we value in and of itself" … "Money, too, makes life much easier than negotiating a barter transaction every time you want to buy coffee" … "Similarly, time allows us to relate physical systems to one another without trying to figure out exactly how a glacier relates to a baseball. But it, too, is a convenient fiction that no more exists fundamentally in the natural world than money does" (Callender, 2010, p. 65).

Is Louv's assumption of Time emotional? "There's no time for recess … They have to spend the time improving their test scores … One thing that youth is supposed to have is time, but now what we're telling kids is not just that we don't have time anymore, but that they don't have time" (Louv, 1990, p. 23). Comments such as these illustrate the stress that kids feel in our fast-paced, highly structured society today. "It takes time – loose, unstructured dreamtime – to experience nature in a meaningful way" (Louv, 2008, p. 117), but spending time that way is often referred to as "killing time" (p. 115). Responsibilities of schools and organizations like Scouting have increased while "family time and free time have diminished" (p. 155), and park visitation is down due to "a shortage of family time" (p. 148). Meanwhile, "[t]elevision remains the most effective thief of time" (p. 119). Statements such as these trigger emotions associated with loss but also with guilt, for as adults responsible for the care of children, we have allowed our perception of time to render their childhood experiences as lacking in nature.

Is Louv's assumption of Time speculative? Louv writes that there have been "decades of denaturing" (2008, p. 260). If one examines history, though, it could be

speculated that nature-deficit disorder had its beginnings millennia ago. Socrates' claim around 400 B.C. that trees have nothing to teach shows that Athenians had already withdrawn their senses from the natural landscape (Abram, 1996, p. 116). Abram writes of Socrates' disdain for the written alphabet as a superficial intelligence and a cause for ruin of the memory. Abram theorizes that it is with the advent of the written alphabet that humans first turned their attention away from nature. The concept of time changed at this point as writing became a method of recording and comparing events.

In spite of this, language, both written and verbal, represents nature. The first written letters imitated shapes found in nature, such as bird prints in sand. Also, many verbal languages have origins in mimicking sounds of the surrounding natural environment, such as birdcalls or drops of rain falling on leaves. Although verbal language is considered to be the distinguishing characteristic that has enabled the success of the human species and separated humans from other similar species such as chimpanzees, language is a product of nature (Morrison, 1999). As *language* has been defined as "innately guided behavior" (Lenneberg et al., 1967), it follows that language is a self-nurtured way of being in nature.

Humans have a long history in nature and a long history of turning away from it. Granted, the sharp increase of time spent with electronic technology in the past few decades has resulted in a sharp decrease in time and experience spent outdoors. It is speculative, however, to assume time is running out to save our children from nature-deficit disorder when it has been millennia in the making.

Is Louv's assumption of Time hidden behind standards of neutrality/objectivity? "Our brains are set up for an agrarian, nature-oriented existence that came into focus five thousand years ago" (Louv, 2008, p. 103). This quote agrees with an even deeper draw to nature that is described by *biophilia,* the inherent affiliation of humans with other living beings and systems (Wilson, 1984). In keeping with the understandings of biophilia, humans are drawn to other life for their own survival; it is this aspect of human life that has allowed evolutionary success.

These considerations deem the assumption of Time for nature-deficit disorder as obsolete in the grand scheme of things. Just as there is more to being human than having a body and a mind, there is more than Time to consider. We have spirit, as well as intuition and genetic memory of a time long ago when we hunted for survival and we were hunted. That our innate love for nature has stood the test of time for millennia in spite of increasing physical distance from nature outdoors, says a great deal about its strength.

Is Louv's assumption of Time applicable for science teaching practice? Although a complex subject to define philosophically and despite its superficiality in comparison to biophilia, Time remains a compelling assumption of nature-deficit disorder for the present fast-paced American culture of the typical reader of Louv's 2008 book. Time, like Nature and Child, has taken on metaphor status. While Time can be a river, a thief, money, or a healer, it is also for many of us in the Western culture the ruler by which we measure our lives. As keeping track of time is an

integral part of how we spend each day, Time as an aspect of nature-deficit disorder urges us to seize the moment and make changes for the Child and for Nature. This is true for science educators, as well as parents. Eco-mindful science educators and parents have a sense of environmental intuition that recognizes the importance of choices in the moment, of immediate action based on innate understandings, based on instinct. The change that Louv is urging us to make is simple: to make Time for the Child in Nature. Through this recommendation, Louv is promoting our development of eco-mindfulness.

ECO-MINDFULNESS AS A REMEDY FOR NATURE-DEFICIT DISORDER

In review of our analysis of the three assumptions of nature-deficit disorder – Nature, Child and Time – it becomes apparent that the benefits that come with time spent outdoors are essentially described with the characteristics of eco-mindfulness mentioned earlier in this chapter: environmental intuition, connectedness, self-awareness, social awareness, positive attitude, and environmental agency. As noted in the beginning of this chapter, the characteristics of eco-mindfulness are intertwined, as are the supporting factors underlying our three assumptions. Nature when defined as nature-as-*experience*-outdoors nurtures connectedness with other living beings and leads to agency for their wellbeing. Nurturing the whole Child supports social and self-awareness while promoting an attitude of positivity. The allowance of Time to be spent in an unstructured manner fosters the development of attention in the environment and environmental intuition that in turn supports the creativity, sense of freedom and self-efficacy of a nurtured whole child who is aware and connected in her/his environment. Although nature-deficit disorder is not recognized with a clinical diagnosis, giving a name to the collection of symptoms allows for those who are afflicted to move forward toward a healthier existence. Eco-mindfulness not only develops through experiences in nature, it serves to alleviate symptoms associated with too much time spent away from it. Time for the Child in Nature encourages the skills and practices of eco-mindedness. It serves as a remedy for nature-deficit disorder.

RECOMMENDATIONS FOR SCIENCE EDUCATORS

The critiques of the assumptions of Nature, Child, and Time underlying nature-deficit disorder that are presented here reveal that they are believable and applicable, although not always literally logical or valid. They are slightly speculative, have aspects that are hidden behind neutrality and objectivity, and harbor characteristics of authoritativeness. Most of all, they are emotional. Viewing Louv's Nature, Child and Time through a lens of eco-mindfulness allows us to relate to his words with our own personal stories, through our emotions. By connecting to our emotions as they relate to Nature and our sense of Child, we are growing our own sense of awareness and environmental agency and modeling it for students; we are developing our own

eco-mindfulness. Eco-mindful teachers are needed in our nature-deficit society to promote eco-just citizens, and science education is just the place to put this realization into action.

Our science teaching should allow emotional and spiritual layers of experience, those often kept to poets and philosophers – if not in words, then in feeling. Scientific understandings will be deeper for it. We cannot make people feel a particular way. We cannot make transcendence or even experience happen, but we can allow it to. We can enable students the perception that, "one's idea of nature is also their idea of a paradise or a heaven on earth" (Louv, 2008, p. 306).

As science educators we are guides for young people in the development of their understanding of the world. We are models of one way in which adults interact with nature. Many of us teach about nature in science but do so from indoors. One perspective of nature that is often inadvertently taught at school is that of a landscape behind the glass that is seen but not touched. Another is that of a photo of elsewhere, a vacation to aspire to or a scene frozen in time and reality. According to the evidence provided by Louv, these just serve as more examples of the separation of self from nature. He urges us to rediscover the nature that is missing, not the nature that is everywhere. To do this, we must go outside.

Surveys of schoolteachers have revealed five barriers to teaching outside: curriculum standards, time, supervision, hazards, and lack of knowledge (Duffey, 2011). Louv's suggestion of going outside does not require much time, curriculum, or knowledge. The nature that he is urging us to find can get hidden behind the paper of curriculum and words of imparted knowledge. The nature that is missing will be found through unstructured exploration with all of our senses. It will change daily, and we will always need it for the health of the whole child and the balance of our nature-self. Louv gives examples of ways in which unstructured time can provide relaxation for students, a peaceful time of few hazards and enjoyable supervision (2008, p. 51), time for eco-mindfulness. Louv's main message is to just do it; just go outside. There is no time like the present. There is no place better than here.

FOR THE FUTURE

We have come full circle and see that the more some things change, the more they stay the same. People have always looked back, seen changes and felt nostalgic for times past. Analyzing the information presented by Louv (2008) brings questions to mind: Are we losing nature? Are we losing childhood? Are we running out of time? In answering these questions, we have developed an understanding that we all have our own definition of nature because our definitions are based in our experiences. Across our own experiences, we have observed children in the woods voluntarily exclaim their love for trees and for nature. After reading *Last Child in the Woods,* we are firm believers that, "We could never have loved the earth so well if we had had no childhood in it" (Eliot, 1860, p. 69). We care for what we know.

The future stewards of the Earth are found in science classrooms, summer camps, and homes today – and everywhere else too, for it is never too late. Nature, Child, and Time are not going anywhere, but we, together with our friends and family, are going outside – now.

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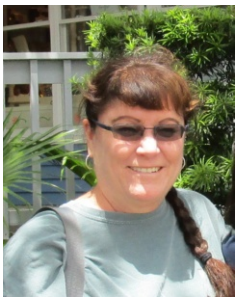

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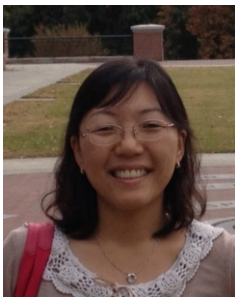

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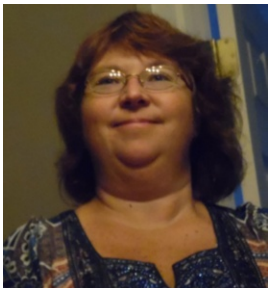

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YOUNG AE KIM, GRETCHEN D. PERKINS, HEATHER A. RUDOLPH,
DEBRA MITCHELL AND DEBORAH TIPPINS

10. I WALK IN NATURE MORE CONFIDENTLY

Using Photoessays to Understand Ecological Mindfulness in Prospective Teachers

ABSTRACT

In the context of an elementary science teacher preparation course, eco-mindfulness can be characterized by the sustainable practices a person develops and then teaches to his/her students or the mindful actions that he/she takes in his/her daily life in his/her environment. In this study, we investigated prospective elementary education students' level of eco-mindfulness and how it evolved during a teacher preparation course that centered on the use of photoessay experiences. Students were interviewed about their conceptions of eco-mindfulness and the photoessay they created while reading Richard Louv's 2005 book, "The Last Child in the Woods: Saving our Children from Nature-Deficit Disorder." Students were found to be more self-aware about the role of nature in their lives and had made a shift toward environmental stewardship by the end of the course. Our study blends environmental wellness with student wellness and science learning to investigate which characteristics increased as elementary prospective student teachers learn from participating in eco-mindfulness activities to incorporate into their future classrooms and lives.

Keywords: case study, eco-mindfulness, prospective teachers, photoessay, environmental stewardship

The relationships between humans and nature have been explored for countless generations. The exploration of reality and perception through human senses by Greek philosophers such as Plato and Socrates dates back to the fifth century BCE. In the nineteenth century American transcendentalists like Ralph Waldo Emerson and Henry David Thoreau explored what the connection between humans and nature meant. More recently, this relationship has been tested under twenty-first century scientific practices and explored by educators while discussing issues such as ethics, values, human health and the disconnect between children and the natural world. Richard Louv (2005) has used the term "nature-deficit disorder" to suggest

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 159–184.

that children's academic, behavioral, emotional and physical difficulties are the result of a loss of time and connection with the natural world.

Humans' relationships with nature garner interdisciplinary questions of interest to psychologists, educators, biologists and many more. One of the main questions at the heart of many inquiries asks whether nature is a human construct or an ideal which exists on its own standing. This question has significant implications for environmental stewardship. If one views nature as a human construct with no intrinsic value, then there is little motivation to protect the natural world. Whereas, if one views nature as having inherent worth, it follows that actions would be affected by this moral understanding. Julia Corbett (2006) provides a useful continuum to explain the underlying ideologies that are central to environmental education and sustainability projects and research. At one end of the continuum are anthropocentric ideologies such as unrestrained instrumentalism where "the natural world and all of its resources exist solely for human use" (p. 28) and conservationism whereby the wise use of natural resources is related only to their potential human use. The other end of the continuum is characterized by an ecocentric focus and transformative ideologies, which "seek new or drastically revised social institutions and recognize the effect of power and dominance in the treatment of the natural world" (p. 28). Corbett places ideologies of preservation, ethics, and values in the middle of the continuum, noting that a preservationist ideology takes into account the ecological, aesthetics and spiritual worth of resources and value laden ideologies call for humans to assume some responsibility in advocating on their behalf.

As science educators integrally involved in the education of prospective teachers, we were interested in learning more about the ecological mindfulness of the future teachers in our elementary science teacher preparation courses and their ideological positions with respect to Corbett's continuum. With Louv's (2005) *Last Child in the Woods* book in mind, we designed a case study using photoelicitation, photoelaboration, photointerview and survey methods to explore prospective elementary teachers' evolving conceptions and practices of eco-mindfulness. We were guided by the following question:

- How do prospective elementary teachers develop an awareness of ecological mindfulness in their lives?

A starting point for the study was our own reading and critique of what we considered to be the most compelling assumptions underlying Louv's notion of nature-deficit disorder: nature, child, and time. In an attempt to clarify aspects of meaning embodied by the term we critiqued these three assumptions in terms of criteria of believability, authoritativeness, logicalness, viability, emotionality, speculativeness, masking of neutrality/objectivity, and applicability for science teaching practice. An in-depth discussion of this critique appears in the previous chapter. We acknowledge that there is a sense of understanding, knowledge and even control that comes with giving something, like nature-deficit disorder, a

name. As Louv (2005) points out, "humans seldom value what they cannot name" (p. 141). As he makes clear in his book, nature-deficit disorder should not be perceived as a controlled or even completely understood phenomenon simply because it has been given a name. It is reminiscent of "attention deficit disorder," a clinical term that along with attention deficit hyperactivity disorder (ADHD) has become more prevalent in recent years. For parents and teachers of children with this disorder, a name can provide relief when diagnosis of the issue and action to improve it follow.

Not having clinical status does not mean that nature-deficit disorder is not an actual issue. There is a great deal of both anecdotal and empirical evidence, qualitative and quantitative, in support of its existence. Many of the participants in our study recalled their own stories or experiences in nature while reading those that Louv shared in his book. Like aspects of spirituality, the feelings that many have for nature can be difficult to define, but that should not keep us from acknowledging them. Our critique of Louv's assumptions of nature, child and time revealed that they were believable and applicable, although not always literally logical or viable. They were slightly speculative, had aspects that were hidden behind neutrality and objectivity, and harbored characteristics of authoritativeness. Most of all, they were emotional. We know as science teachers that there is more to a child than test scores and grades. We know as humans the joy one can feel in nature from a distant memory or from the sunrise seen in the morning on the way to work. We know, in spite of the lack of an agreement on the existence of time, that we have had experiences in the past that we have grown from and visions for the future that we aspire to. While Louv's focus in his book is the child, the message is really about the reader. He writes in a way that touches the child within the self of the reader, allowing the prospective teachers to see themselves in ways they had not seen in a while. Our initial analysis of assumptions in Louv's book set the stage for our investigation of prospective teachers' eco-mindfulness and its evolution during a science teacher preparation course. As the prospective teachers engaged with the book and each other during the semester they were able to revisit memories of childhood and experiences in nature and reflect on the child within oneself.

CONTEXT OF THE STUDY

This case study was situated in the context of an elementary science teacher preparation course for 20 undergraduate students at a large university in the southeast region of the United States. The place-based emphasis of the course provided many opportunities (e.g., eco-diaries, sustainability experiences, school gardening) for the future teachers to consider the potential of the natural environment for teaching and learning science and to explore their own relationship to the natural world. During the course, students read Louv's (2005) *Last Child in the Woods: Saving*

Our Children from Nature-Deficit Disorder and created photoessays as a way to reflect on their personal connection to the issues in the book. They were introduced to the idea of eco-mindfulness as a theoretical tool for guiding their reflection. The primary participants in the study were five prospective teachers who were selected on the basis of their responses to a pre/post ecological mindfulness survey. In this chapter, we highlight the stories of three of these prospective teachers, Lacey, Yolanda and Emma, and their quest towards eco-mindfulness.

THEORETICAL OVERVIEW

Ruth Baer, Gregory Smith, Jaclyn Hopkins, Jennifer Krietemeyer, and Leslie Toney (2006) characterized mindfulness as a "set of skills that can be learned and practiced" (p. 27). By extension, eco-mindfulness can be described as a set of skills that can be developed and informally practiced by people with their experiences in and with their environment. Mindfulness, a recent movement in science teacher education, has grown out of the Buddhist tradition, and is thought to reduce stress and increase attention and self-regulation. John Meiklejohn, Catherine Phillips, M. Lee Freedman, Mary Lee Griffin, Gina Biegel, Andy Roach, Jenny Frank, Christine Burke, Laura Pinger, Geoff Soloway, Roberta Isberg, Erica Sibinga, Laurie Grossman, and Amy Saltzman (2012) explain how the practice of mindfulness can be either formal (with meditation practice) or informal, where practitioners incorporate mindful practices into their everyday lives and teaching practice.

Ecojustice theory posits that humans are connected in complex interactions that we depend on for life, in other words, that we are not separate from our environment (Martusewicz, Lupinacci, & Schnakenberg, 2010). Ecological mindfulness can be thought of as a bridge between ecojustice and mindfulness. In the context of an elementary science teacher preparation course, it can be characterized by the mindful actions that prospective teachers take in their daily lives and environment as well as the sustainable practices they develop and share with their students. We adapted Malgorzata Powietrzynska, Kenneth Tobin and Konstantinos Alexakos' (2015) heuristic description of characteristics of mindfulness to describe eco-mindfulness as consisting of environmental intuition, connectedness, self-awareness, social awareness, positive attitude, and environmental agency. We defined these characteristics in the following ways. Environmental intuition is the ability of a person to perceive and react appropriately to what is going on around him/her; this could include having keen senses for perceiving animals nearby. Connectedness is described as how aware a person is that what goes on inside a classroom is connected to the school, neighborhood, and larger community. Self-awareness is the ability of a person to recognize the physical conditions that reflect emotions. How focused a person is on his/her task when outside is described as attention in the environment. Environmental agency is the degree to which a person feels a responsibility to act in a way that protects some elementary aspect of the environment (including sustainable practices).

The Need for Fostering Ecological Mindfulness in Prospective Teachers

Many researchers have indicated how significant early life experiences affect individuals' relationships with the natural world. Bruce McEwen (2008) described the powerful effects of early life experiences on physical and emotional health as well as cognitive development lasting throughout the entire lifespan; he stressed the importance of early life experiences in determining how individuals respond throughout their lives.

Early childhood experiences are also important when it comes to children's relationships with nature. Good memories with nature in early childhood can influence views and images about nature as adults. For example, in this study, many of the prospective teachers recalled experiences with a version of the "bogeyman" story in their early age and its influence on them. One of the prospective teachers described how fear of the bogeyman was ingrained in her mind by her parents and the media at an early age, and the way in which this figment of her imagination remained with her into adulthood. Her story suggests many significant implications about parents' roles in developing children's relationships with nature. In many cultures, there are stories similar to the "bogeyman," which are used to scare children. These stories have been inscribed in children's minds and have had a significant impact on their perceptions about nature for a long time; also, they may limit children's life experiences and relationships with nature. Louise Chawla (2006) noted that a child must feel a sense of self-efficacy in nature to love nature, and this sense of competence begins with modeling by a respected adult. Chawla goes on to explain that "The very fact that a parent or grandparent chose to take the child with them to a place where they themselves found fascination and pleasure, to share what engaged them there, suggests not only care for the natural world, but, equally, care for the child" (2006, p. 57).

A respected adult for children could be a parent, a grandparent, a teacher, or a neighbor. In their early ages children should develop the sense of self-efficacy in and enjoy nature not only in their home but also in schools. In this sense, teachers need to be eco-mindful adults and role models for children. Becoming an eco-mindful teacher starts with being aware of one's environment and relationship with nature as well as the importance of children's relationships with nature. The rationale for this study is quite simple: *to raise* ecologically responsive citizens, teachers need *to be* ecologically responsive adults and figure out how to foster eco-mindful practices in youth.

Concerns about sustainability and the development of an ecologically responsive citizenry are important issues today. In spite of media attention around issues of sustainability, many teachers have not developed appropriate understandings of sustainable practices to share with children. In many cases, sustainability is perceived as a special issue that belongs only to a few "tree huggers." For these reasons, there is a need for the development of eco-mindfulness in teachers rather than a prescribed list of sustainable practices (Sherman, 2008). Furthermore, Daniel

Sherman (2008) argued that sustainability must be incorporated into the curriculum, and not simply addressed in specialized workshops or programs. Powietrzynska et al. (2015) noted that, "issues of wellness, sustainability, and literate citizenship are among highly desirable aims of education" (p. 2) and we would argue, should be an essential component of science teacher preparation.

METHODOLOGY OF THE STUDY

Case study is a way of doing social research that allows empirical inquiry in depth and within real-life context (Yin, 2009). Context and participants are key components in case study research. Case study research is recommended for education because of its educative process. It is useful for telling the "story of the case…not in a chronological sense but through an integration of inferences and interpretations of events organized to tell a story of the whole" (Simons, 2009, p. 6). As Helen Simons (2009) concluded, the purpose of case study is "to present a rich portrayal of a single setting to inform practice, establish the value of the case and/or add to knowledge of a specific topic" (p. 24), which makes it a good fit for this study. There are many types of case studies (Stake, 1995). In this collective case study, five prospective teachers helped us learn about their development of eco-mindfulness. Each prospective teacher was considered a case.

At the beginning of the semester prior to their student teaching, a group of 20 prospective elementary teachers completed an eco-mindfulness survey. The survey was an adaptation of the mindfulness heuristic developed by Powietrzynska, Tobin and Alexakos (2015) and included characteristics of eco-mindfulness described previously (see Appendix A). The survey used a five-point frequency scale. One indicated "hardly ever or never," two meant "rarely," three was "sometimes," four was "often" and five indicated "very often or always." Examples of statements on the survey include: "I notice individual sounds when I'm outside, like birds calling or leaves rustling." "When I am outside, I can focus my attention on learning." Each item on the survey also included a space for student comments. The prospective teachers completed the same survey again near the end of the semester.

Throughout the semester the prospective teachers participated in activities related to the development of eco-mindfulness. Each also created a photoessay in conjunction with reading Louv's (2005) book "The Last Child in the Woods: Saving our Children from Nature-Deficit Disorder." Five primary participants participated in an individual 30-minute semi-structured photointerview that was conducted to elicit an understanding of eco-mindfulness in their daily lives. These individuals were selected for photointerviews based on their survey responses. Prospective teachers who demonstrated high, sustained levels of eco-mindfulness, great gains with respect to eco-mindfulness and little to no gain in eco-mindfulness over the course of the semester were selected to participate in the photointerview and share and discuss their photoessays. In this sense, during the photointerview process participants were interviewed as they discussed their photos, enabling the

researchers to learn about their perceptions and sense making. The photoessay was one example of photovoice (Wang et al., 1998), enabling participants to document their daily lives, record and reflect on their thoughts about the issues surrounding Louv's notion of "nature-deficit disorder," and engage in dialogue. We ultimately hoped that the process of photovoice would enable participants to begin to question their own social situation in relation to nature and take action.

The photoessay enabled us to "touch on the limitations of language, especially language for descriptive purposes" (Walker, 1993, p. 722) as we engaged in data collection and analysis. Our use of the photoessay involved the processes of photoeliciation, photofeedback and photointerviewing. The process of gathering feedback from participants about the photographs and narrative they assembled was one of photoelicitation. As Jon Prosser and Dona Schwartz (1998) explain, photoelicitation is based on an "assumption that the chosen images mark some significance for participants" (p. 124). Photofeedback is a form of photoeliciation in which participants develop written reflections to accompany their photos. While photofeedback can reduce the feelings of vulnerability and anxiousness that might be caused by talking directly with a researcher, the depth and breadth of responses may be limited if used exclusively without a photointerview.

Research team members read through participants' photoessays and photointerview transcripts and independently coded and analyzed them. Then, as a group, the team conducted a second level of analysis and discussed discrepancies to generate common themes. Results of the team's analysis are illustrated by the following narratives, which were constructed from direct quotes from students' photointerviews and photoessay.

NARRATIVES

We included three students' narratives in this chapter whose stories represent the range of environmental ideologies along Corbett's (2006) continuum. For example, Yolanda's story seemed to be the most anthropocentric in nature of the three cases so we begin with her story. Next to be discussed is Lacey, whose story reflects aspects of ethics and value driven ideologies. The third case presented is that of Emma who we felt demonstrated the greatest level of eco-mindfulness.

The first narrative describes Yolanda's eco-mindfulness journey, which was heavily influenced by her perceptions of barriers between humans and nature.

"Now I Walk Outside at Night": Yolanda Overcomes Her Fear of Nature

> I was happy to meet up with my best friend Brisa today. It's been so long since I've seen her. It's hard to find time now that we're in our senior year. After dinner, we jumped on the trampoline, like when we were kids, a really rare experience for us now. We had a great time! There were bushes surrounding the trampoline and a few faint lights. I normally don't like to stay outside at

> night, because I feel scared whenever I am outdoors in the dark or even when I am outside alone during the daytime. I felt very brave staying outside at night, but I was with my best friend and she wanted to jump on the trampoline like when we were young. How could I say no? Like me, she also feels the pressure of school. I hope she feels better and gets everything done. Today felt so special. I will never forget the moment that I enjoyed playing and talking with Brisa outside in the dark without being scared. It allowed me to see things I hadn't noticed before. There were a lot of stars in the sky! We just sat there and talked and looked at the stars for a long time. This brought us closer together. Not once did I think about the Bogeyman.

Yolanda is a first generation Mexican-American prospective teacher who was born in Chicago. She referred to herself as a person who lacks experience with nature. However, she demonstrated a significant amount of growth in terms of eco-mindfulness between her pre- and post-survey responses. While most participants in this study initially demonstrated positive perceptions about nature, Yolanda explicitly expressed a deep fear of nature throughout her photoessay and photointerview.

Yolanda's reflections suggest she has held an "anthropocentric" view of nature throughout her life (Corbett, 2006). She viewed nature as a solution for teaching and learning.

> I understand a lot more of the benefits that come from being exposed to nature. I also know that the term "nature" is not limited to just the outdoors, but to all aspects of nature-animals, birth, death, and being educated in order to help conserve the places we live in. Another way to experience nature in the classroom is through a class pet. A pet such as a Sugar Glider would be great because it wouldn't disrupt class (as it is nocturnal) but is also an animal that would entertain children, making them curious. This will help expose them to the hands-on experience that Louv suggested. (photoessay, 4/22/2014)

In the excerpt above Yolanda described two ways of connecting with nature. She suggested classroom pets as a way of experiencing nature in hands-on ways. This is consistent with her perception that animals exist primarily for human benefit such as entertaining or building children's curiosity; she did not entertain the idea of animals' having their own rights or values.

Yolanda noted that she had never been fond of nature and was worried that reading Louv's (2005) book and creating a photoessay would be a difficult task (photointerview, 4/29/2014). However, during the semester she gradually began the process of overcoming her fear of nature and expressed an increasing desire to connect with the natural world.

Throughout the photoessay process, Yolanda discussed nature by describing what she perceived as clearly defined boundaries between humans and nature. She emphasized how this separation was evident not just between humans and

nature but also in terms of the bonds between people. She described ways in which technology hurts not only today's children, but also the whole family (photoessay, 4/22/2014). For example, Yolanda used a cartoon of children at a playground who were so focused on their electronic devices that they did not even see each other. She realized just how much nature benefits relationships and bonds with others. She recalled a memorable moment with her friend outdoor at night, which was described in the opening vignette. *"There was one time when me and my best friend, we were just on the trampoline late at night. I feel like that really helped our bond…like come closer together"* (photointerview, 4/29/2014). This memorable moment could be described as a touchstone event for Yolanda as she shifted towards overcoming her fears of nature and building a relationship with nature and others.

Yolanda expressed many rationales for her own lack of a relationship with nature, but clearly wanted to understand the barriers she described: technology, fear, danger, schooling, testing, and industrialization. She described the barriers in terms of two categories. The first category, technology/schooling/testing/industrialization, did not prompt negative feelings about nature for Yolanda; rather, she perceived the indirect, constant, and unconscious negative effects these factors had on her relationship with nature was much like a thief, robbing her of the opportunity to build meaningful connections.

Yolanda started her photoessay with a story about how technology relates to nature-deficit disorder at both a societal and personal level. She described how technology contributes to a lack of connection between people and nature today:

> Technology today is seen everywhere – in every building, every school, every home. It is very popular but as a whole, we have yet to realize how much we allow it to waste our time. Even then, we may refuse to do anything to change that habit. Kids say, 'I like to play indoors better because that's where all the electrical outlets are.' Many children in this century are so wrapped up with technology that going out to play in nature is often not something they think of to have fun. (photoessay, 4/22/2014)

As Yolanda noted above, electrical outlets are mostly indoors and because many people feel they cannot be far from a power source they remain indoors. One interesting metaphor Yolanda used to describe her positionality was "*four walls and escape*." She explained,

> I feel like just being trapped in those four walls kind of distracts us from some of things that we may bring up…a way to escape from things to find restoration. The enclosure of being in four walls separates us from outside. (photointerview, 4/29/2014; photoessay, 4/22/2014)

Yolanda explained how the second category of barriers, what she described as the fear/danger of nature, has contributed directly to her negative feelings and images about nature:

> Fear and danger are two of the main reasons we keep children indoors. For example, today's news constantly reminds us of the dangers of this world. Stranger-danger is a term they use. It has gotten to the point where we don't even know the names of our own neighbors. Horror movies are another main sources of fear towards nature today. Films like this not only make people afraid of nature but also of strangers and people in general. This in return could result in fewer social people, just scared people. (photoessay, 4/22/2014)

Yolanda recognized the role media has played in her own life in cultivating this fear/danger image of nature. She particularly emphasized ways in which technology contributed to a culture of fear.

Throughout the semester, Yolanda experienced an ongoing journey from fear of nature to ecological mindfulness. More importantly, she expressed the belief that she is gradually overcoming her fear of nature. Yolanda said,

> I feel like now I walk with more confidence even at night … before I'd be really scared of keeping my window open even at night, but I actually have done that a few nights now and I feel like I sleep better with the wind coming in. (photointerview, 4/29/2014)

Yolanda was able to pay attention to her own emotions in her feelings about the wind coming in through the open window even at night. This attention can be interpreted as self-awareness (Powietrzynska et al., 2015) as well as an overcoming of the fear of nature. For Yolanda, a starting point in shifting towards ecological mindfulness, was her explicit attempt at giving more attention to nature and being aware of self in nature. For example, she described a change in her everyday life, by sharing about her awareness of the birds' early morning dawn chorus and her growing attention to it. She now associates nature with birds, plants, trees, other animals, and many things besides fear (photointerview, 4/29/2014).

Yolanda expressed many ambivalent feelings towards nature, stretching from the fear of nature to nature as a healer. The fear of nature and nature as a healer at first glance appeared to stand in contrast to each other. However, for Yolanda these two perceptions held something in common. She explained how a healer, such as a doctor, could be considered as an expert who knows everything about illness and supervises his/her patients. Likewise, Yolanda viewed nature as a superior phenomenon rather than a familiar friend. This speaks the same language in terms of her perception of fear of nature. For Yolanda, fear comes from uncertain existence, like the bogeyman, and a certain distance from nature and lack of experiences with nature reinforce this uncertainty and unfamiliarity. This human/nature dichotomy, nature as a healer and fear of nature, corresponded with Yolanda's perceptions of nature as another existence with which she was not familiar but had a desire with which to connect.

As an example of how she viewed nature as a healer, Yolanda described her nephew's attention deficit hyperactivity disorder (ADHD) and her belief that

children with ADHD become calmer after spending time outside. She recalled how being outside made a big difference for her nephew.

> My nephew was actually put in special ed his kindergarten year. He's been special ed since then. I just never thought of nature as a way to get him to escape from things. After I started reading the book, I would take him out more often, even if it was just in our front yard. Taking him outside a few minutes helps calm him down and he is a lot more cooperative after having some time outside. He'll listen and obey a lot better. As future elementary teachers, we hear more and more about students being diagnosed with ADHD. Putting them on medication is the #1 solution. With my nephew, I have witnessed the benefits children get from being outdoors. This does not just go for those with deficit disorders but for all children. (photointerview, 4/29/2014; photoessay, 4/22/2014)

Yolanda suggested *"nature therapy"* as a feasible prescription for children physically and emotionally. She extended nature therapy to herself, as well:

> The use of daily drugs to "help" emotional health has made it easy to overlook the fact that nature experiences can relieve some of the everyday pressures that may lead to childhood depression. Nature therapy is not something that is commonly recommended. I've even found it works on myself. If I am having a really bad day, I'll go outside and I'll take a walk and just take a little breather. That's how I get myself back together. My main use of nature is for restoration. Being outdoors has the power to relieve me of my stress as it is for many kids with deficit disorders. (photointerview, 4/29/2014; photoessay, 4/22/2014)

For Yolanda, nature has the ability to heal people's problems. This perception was shown clearly in her usage of the term *"restoration."* On the other hand, Yolanda's declaration that the "main use of nature is for restoration" (photoessay, 4/22/2014), clearly represents her anthropocentric view of nature, in particular "conservationism," as she gave a lot of weight to the "wise use of nature" (Corbett, 2006, p. 28). Yolanda described how nature has the potential to relieve teacher stress and help students focus on learning (photoessay, 4/22/2014).

Overcoming one's fear and separation from nature and separation from and fear of other people is a start toward increased eco-mindfulness. As a future teacher, Yolanda has started to think about how to connect children to nature as well as herself. *"I hope to spend a lot of time with my class outside. I just see myself spending more time in nature. A lot more than I do now, and I feel like that'll just keep happening"* (photointerview, 4/29/2014). Now, she is dreaming about her future house with a hammock in the yard, where she can spend time connecting with nature.

> Every time I encounter a Weeping Willow tree I remember about one of the things I have told myself over and over that I would do when I have my

> own house: To plant a Weeping Willow tree in my backyard and use it as my place for restoration. (photoessay, 4/22/2014)

Yolanda overcame her fear of nature by becoming more self-aware through participation in class discussions and reading Louv's (2005) book. By reflecting on her feelings of fear while in nature, she became more ecologically mindful. She made conscious decisions to face her fears and began to recognize she wanted to share her newfound relationship with nature with her future students. Like Yolanda, in the next narrative, Lacey had a tenuous relationship with nature in her teens. Instead of being afraid of nature, Lacey viewed nature apathetically during her teenage years.

"Nature Used to Make Me So Happy!": Lacey's Struggle to Return to Nature

> It's five a.m. and the birds have started their early morning chorus. I lay in my bed, listening to their pretty songs. The cool morning air caresses my face through my open bedroom window. It wasn't so long ago that I would have grumpily thrown the pillow back over my face and returned to sleep, but this morning the birds and the morning breeze energize me. Yesterday afternoon, my friends and I were watching TV while we studied for this morning's test. My attention was waning and I couldn't concentrate on my notes any longer. I asked Tiffany and Emma if they wanted to go for a walk with me. They complained at first, saying they didn't have time and that it was too hot, but I reminded them about our photoessay assignment – we could use the walk to take pictures! We grabbed our cameras and headed out the door to the trail behind my apartment. I noticed colors of the leaves on the trees and found myself gazing at the delicate pink flowers on a bush. It was a really short walk, but I felt better than I had in days. Maybe they will want to go for a walk this afternoon too. I noticed some trash on the trail – I can take a trash bag out with me and pick it up.

Lacey, a young woman in her early twenties, who was influenced by her nature-loving parents and her experiences in an elementary methods class, has turned her attention back to nature and is creating for herself a nature-centered life. Her eco-mindfulness journey has been characterized by her separation from nature as a teenager and her return to it as a young adult. More than the generalization in her photoessay about all children, her sketch of a faded, blurry tree also embodied her own adolescent experiences with nature. She described her declining relationship with nature during her adolescent years:

> I was born in a secluded neighborhood in the suburbs of Atlanta. Growing up, I used to love nature – we rarely went into the city. I spent all my free time climbing trees, running in fields, making forts, and using my imagination. I loved the feeling I got when I climbed to the top of the tree or swam to

> the other side of the lake. My family has a lake house and we spent a lot of time there, as it is my mother's favorite place to visit and my father is an outdoorsman. Nature holds some of my best memories. However, as I got older and we moved closer to the city, things changed. My friends started staying inside even on pretty days. I would beg them to come outside and play with me, but everyone stayed inside. I would play alone, climbing trees for hours and just read, write, or draw. It was my place that no one could interrupt and where I could be at peace. Soon, I started to feel alone. Nature could no longer keep me company so I started to care less about being outside. I started to prefer to be inside on the computer or watching TV. It didn't matter how nice it was outside. My parents would always tell me I was wasting the sunlight, but I didn't care. I even chose sleeping over being outside; nature just wasn't important to me anymore. (photointerview, 4/29/14; photoessay, 4/22/14)

Lacey described her separation from nature as one that was inevitable because of all the distracters focusing her attention elsewhere. Her friends, homework, television, and even napping were all more important than the happiness and peace she experienced outside.

On both iterations of the eco-mindfulness heuristic (pre-survey, 2/2/14; post-survey, 4/22/14), she expressed that she was always able to focus her attention on learning when she was outside, but only sometimes was able to focus her attention on learning inside. On the post-survey (4/22/14), she explained this difference by stating that her "attention is much stronger" when she is outside. When she described what she felt she missed out on as a teenager, she used very detailed language that illustrated her increased attention to her environment:

> I have grown to regret losing touch with nature. All of my favorite childhood memories are of being with family and friends outside. Nature used to make me so happy. A computer game only allows a child to use two of their senses – hearing and sight – but my senses came to life when I was in nature as a child. I would smell the fresh cut grass or the lovely flowers blooming. I would hear the birds chirping and the bugs screeching. I used sight to decide what my next adventure would be. I used taste to see what I would help my mom cook from the garden. I would feel the leaves, mud and acorns to make the next mud pie. All of my senses helped me explore nature and, in turn, nature helped me to develop my senses. Now that I have experienced those things, I can sleep with my window open and listen to the crickets and fall asleep faster than if I had the television on. I can also fully enjoy a vegetable or herb from the garden. I love the feeling of mud between my toes. (photointerview, 4/29/14; photoessay, 4/22/14)

Since her experiences in the elementary methods course, Lacey has made some big changes in her life. On the eco-mindfulness heuristic, her score increased dramatically compared to most of her other classmates. On the pre-survey (2/2/14), Lacey

wrote that she often feels more positive about life when she gets to be outside, but that her emotions were dependent on the weather. However, on the post-survey (4/22/14), she expressed that she indicated feeling more positive about life when outside and that being outside made her feel "happy and not lazy." She has begun to reconnect with nature in a way that she had not since childhood, resulting in a change in her attitude. In addition, she has intentionally attempted to change others' attitudes about nature as well. In her pre-survey, she emphasized how she always encourages others to take care of the environment, with the explanation that she "hates littering" (pre-survey, 2/2/14). In the post-survey (4/22/14), Lacey claimed to encourage others to take care of the environment often, but not always, and gave no explanation. In another statement where she talked about herself, Lacey responded that she worked hard to reduce her daily impact on the earth "sometimes" on the pre-survey (2/2/14), but on the post-survey (4/22/14), she changed her response to "often." As a caveat on the post-survey (4/22/14), Lacey added: "*I have worked harder these past months*" to reduce my impact on the earth. These combined statements suggest Lacey has increased awareness about taking care of the earth. She has been advocating for her friends to do the same:

> 'Last Child in the Woods' really opened my eyes to my detachment from nature. It made me think about what I missed out on as I was sleeping away the day and waking up after the sun had set. Television isn't that important either – I can always watch a rerun. I don't need to be attached to my cellphone, because I can check it anytime. I started going outside more so that I could notice things. I would catch myself staring at flowers, trees, and noticing their different shapes. I wanted to be outside more frequently, so I started encouraging my friends to come with me. I'll ask them to go for a walk with me or open the windows and doors so we can get some fresh air and sunlight. Since I started encouraging them, they really liked the idea. Now we go for a walk at least once a day. We will sit for hours when we are stressed out from school, just sitting on the couch and watching TV. When we sit inside all day, I'm ready to go to bed at 8 pm, but if we spend time outside, I can stay up later and I'm so much more productive. I haven't taken a nap in a week – and that's a really big deal for me, because I used to nap every day. (photointerview, 4/29/14; photoessay, 4/22/14)

Lacey's advocacy with her friends has also led to increased bonding with her parents. She discussed conversations with her parents that helped her process her relationship with nature, both past and present:

> After I read Louv's book, I called my parents and said, "Let's talk about this." I told my dad I think he needs to read the book for himself because he would love it. He lived in a teepee for a couple of years in Colorado working in national parks. He's just so big into nature and reading this book helped me realize all the things that my parents did to help me love nature, too. My dad

> and I have been talking every day about little things. He can't wait for me to come home and see the garden we planted a few weeks ago. He is thrilled to show me how it's grown.
>
> I talked to my mom about Louv's book too – I told her I felt she was afraid for me to be in nature as a kid because I remember all these boundaries she gave me when I would go out to play in our neighborhood. It upset her when I said that! She started listing off all the things that we did at our lake house to prove to me she wasn't afraid for me to be in nature. I just feel like nature has brought the three of us closer – like we were when I was little. For example, we ate dinner outside as a family for Easter. (photointerview, 4/29/14; photoessay, 4/22/14)

Due to the increased closeness nature has brought to her family, Lacey was more thoughtful about her personal relationship with the outdoors. Being mindful in nature and focusing her attention on the environment was a struggle for Lacey. She attempted to combine anthropocentric views with emerging ecocentric views as her ideas about nature changed (Corbett, 2006). As a result, she struggled to find a balance between being in nature and being part of nature:

> I think the biggest challenge for me through this photoessay experience was admitting that there was a time when I was not connected to nature. I thought I loved nature, despite not spending time with it. However, I needed to open my eyes and realize that something had to change. Nature is out there and it's important. We need to be aware of the nature around us and make sure we are taking the time to experience what you have at that time because you never know what's going to happen or what could disappear or be destroyed. These days, people care less about the species in nature and don't realize that nature belongs to the animals too. I like to remember that nature is the animals' space too and not ours to destroy or intrude upon. You have to think about who and what is living there. I have a part in nature, but I also must blend in to experience it. Nature gives me a place to have my own space where I feel like I can be accepted and belong. (photointerview, 4/29/14; photoessay, 4/22/14)

For Lacey, this return to nature symbolizes a return to childhood. In these memories, she discussed what nature has done for her – an anthropocentric instrumentalist view of nature (Corbett, 2006). She shared memories of childhood, which revolved around the outdoors and expressed a desire to help her future students create similar memories:

> Nature makes me really happy. When I was a kid, my friends had a really cool backyard and we would use our imaginations to play pretend games. We pretended leaves were food and we would make potions and pies. Our games took over and I was transported to another place. I can't remember a time playing with my friends that I was mad or upset. If I could go back to any

> time in my life, I would go back to being eight years old and in that backyard. I want to share that feeling with my future students. I always like to pick a time during recess and walk around to talk to each of the students. I feel like it's important for me to walk with the kids to get to know them. I play soccer with them so that they feel comfortable opening up to me. (photointerview, 4/29/14; photoessay, 4/22/14)

Of all of the participants, Lacey was the most focused on the details of nature and her attention to them. Over the course of the semester, Lacey inched her way from an anthropocentric instrumentalist to appreciate more ethics and value driven environmental ideologies (Corbett, 2006). While Lacey did not fully embrace transformative views of the environment, she developed the belief that other species have a place in nature and it is not humans' place to interfere.

Lacey's desire to inspire future students to bond with their environment helped foster the drive to reflect on her own relationship with nature and become more mindful of her place in nature. For Lacey, becoming more eco-mindful meant focusing her attention on her surroundings. When she described her journey, she vividly characterized features of her environment. She described how her desire to nap, watch TV, and interact with her cell phone had muffled her senses and contributed greatly to her nature-deficit disorder. She explained how her dulled senses made early morning singing birds annoying and made her feel lethargic. A renewed sense of attention to the sunlight and fresh air energized her and helped her become a liaison of nature for her friends. Her increased attention to the features of her environment also renewed familial bonds and brought her closer to her parents again, a more mature relationship than her idyllic childhood memories.

Lacey's narrative demonstrates how a more distant relationship with nature can become less so once it is recognized. Lacey demonstrated self-awareness in her realization of her separation from nature and social awareness in how she now bonds with her parents in nature. Her fixation on the details of her environment characterized her renewed relationship with nature. She used the details to make her life more pleasant, for example, being energized by the sounds of birds chirping and the sun on her face. Unlike Lacey, the next narrative highlights a participant who has had an ongoing relationship with nature her entire life. Emma's continuous relationship with nature was fostered through her summer camp experiences.

"Every Summer I Reconnect to Nature and There, I Reconnect to Myself": Emma's Eco-Mindfulness Journey

> I have started reading this book and I am intrigued. Louv talks about a concept called the "3rd frontier" which he says has to do with our current disconnect from nature. He writes about how kids don't spend time outside much these days because they are so tied to their electronics. My thoughts

> drift to when I was growing up not that long ago. Living in New Jersey was great! There were so many kids to play with because we lived in family housing so we were outside all summer playing together. When I think about it though, I started just playing with electronics, computers and video games when we moved to an urban area in Kentucky because there just weren't any kids to play with so I just quit spending time outside. I was mad when we had to leave the city and move to rural Mississippi! But … that's when I started going to camp every summer and that changed my life. It's not that my parents didn't make time to take us fishing and hiking. They were great about that but I think they just got busy and we did less as I got older. I smile as I think about summers in Mississippi. Mom literally would send us outside and lock the door so we had to be outside playing. There were woods to play in and neighbor kids and we were just out all the time! I think that is when I started to realize that being outdoors is more than just a place for people. It is a place that has value whether or not humans see it as beautiful or "special." Every place has value in some way.

The vignette that introduced this section provided an overview of Emma's journey towards eco-mindfulness. Emma, a prospective teacher in her early twenties, spent many summers of her youth at a summer camp as a camper and as a counselor. Emma scored consistently high on the eco-mindfulness survey with her pre and post levels remaining the same. She described many joyful memories of outdoor time, both with her family and alone, in her photointerview and her photoessay. Through family activities and participation in camp, Emma displayed an ongoing relationship with nature. *"I always loved it. It was somewhere that I wanted to be"* (photointerview, 4/29/14).

Emma's view of nature was consistent with a preservationist environmental ideology in terms of Corbett's (2006) spectrum. For example, Emma described being outdoors as something she perceived as necessary for human life. *"That's really when it really hit me that this was a need we have as people, not just something we like to preserve, and something we like to be around"* (photointerview, 4/29/14; photoessay, 4/22/14). In this quote, Emma did not describe nature as having a use but rather as a place where a need is fulfilled. She also described being outdoors as a way for her mind to relax and let go of stresses from her daily life. She explained how her experiences with nature have provided her with a sense of *"being in the present, where I am, and not thinking about all that I have to do like in real life"* (photointerview, 4/29/14; photoessay, 4/22/14). She explained how nature has enabled her to feel a release from pressures she normally experienced on a daily basis.

Emma also described her spiritual connection with nature and her desire to share it by holding worship outdoors. She related the story of an event that disrupted her expectation of sharing her feelings and commitment to preservation when she talked about a creation story she intended to present outside to her campers.

> It's a Presbyterian camp that I work at and we have a small bible study and a worship every night. Last summer I was on the resource staff, the people who are in charge of the church of worship. I planned this whole worship/ bible study for the kids, about creation and nature and it really fell in line with what Louv was talking about. We ended up having it in the church but like part of the worship was for the kids to go out and find some piece of nature and bring it back in and use it as their offering later. We talked about how God created that stick or that tiny little rock or that blade of grass or looking at the stars … We planned it to be at the outdoor worship center, but it just kept not happening, like it was raining or we couldn't get lights out there or it was too dark … something like that all summer long! I actually was really upset. (photointerview, 4/29/14)

In the above description, her disappointment was evident. In this narrative, Emma did not attach an instrumental human use or value to nature. Instead, consistent with a preservationist ideological stance, she explained her belief that natural resources have a spiritual worth that she wanted to share with other campers.

Emma's encounters with the natural world seemed to have become even more meaningful to her when she began attending camp each summer, an experience that was clearly the catalyst for her deep appreciation of nature. Having spent six years as a camp attendee and four years as a camp counselor, she drew heavily on her experiences for support of the importance of time in nature. For example, she stated, "*Camp has really given me how I feel about nature though. That's what gave me a sense of place and all my favorite spots at camp are outside in nature. Camp really gave me appreciation for it"* (photointerview, 4/29/14; photoessay, 4/22/14).

Although Emma recognized the importance of being outdoors her whole life, she emphasized going to camp as formative and essential in developing her sense of place and appreciation of nature.

Emma displayed a strong sense of agency in her desire to ensure today's youth grow up experiencing nature and the outdoor environment. She described her own experiences as a child, noting, *"[When my mom was growing up, my grandmother locked the door and would not allow her] to come back inside until sun down, so that's kind of how she raised me and my sister"* (photointerview, 4/29/14). Where that kind of forced time outdoors might have frustrated some people, Emma experienced it as further support of her love of small towns and outdoor activity. She explained:

> I hate cities. I hate them a lot. [This city] is giant compared to the majority of where I've spent my life. I kind of want to be in a small town. My neighborhood at home is called Woodland Hills and everybody has a house, and then like 3 acres of woods behind their house and then another house so, it's really, really wooded. Me and my sister used to explore that all the time. Something like that where the kids have a chance to be outside in summer time is really important. (photointerview, 4/29/14; photoessay, 4/22/14)

Emma relied on her love of playing outdoors to support her view that children should spend a lot of time in nature. She expressed great dismay when her peers shared camp experiences that took place primarily indoors (e.g., computer/gaming camps) with little opportunity to connect with nature.

> Just let them know that they're going to camp whether they like it or not, a cool camp, outdoor camp. I was so shocked when people were talking about computer camps and the kind where kids aren't outside! I was literally outside all day long, no air conditioning. We never feel hot because you aren't going back and forth between 100 degrees and 60 degrees inside. That's how it was at camp because we have air conditioning in the cabins but we're only in the cabins to sleep. The rest of time we're outside. I get used to the heat of summer. Every activity is outside. Rarely is anything inside unless it's raining. We have nature hikes, nature studies, and I would have to lead them so I would be like, 'This is a sycamore.' I went to camp for forever and then I was a camp counselor for forever. (photointerview, 4/29/14; photoessay, 4/22/14)

Emma expressed a sense of feeling out of place when she is with people who do not feel the connection with nature that she does. "Like another language" is how she described what she felt when she found out that her roommates and classmates did not share similar experiences with nature and camp.

Emma noted that she felt comfortable being alone outdoors and described these solitary experiences as some of her favorite times.

> I was alone a lot because I didn't have campers but I still had to go meet them and teach them stuff or go meet my cabin group. A lot of times it would be me walking the trails to get to them, just me, because that's all they needed. We also had things called staff solos at the end of the summer, so you could go off by yourself and find a special spot at camp and reflect. I just felt at peace with where I was and who I was. I was so happy to be where I was and I felt at peace. (photointerview, 4/29/14)

Emma advocated for the inclusion of environmental education and outdoor experiences in the school curriculum and expressed conviction that exploring and building a relationship with nature can have a critical impact on children's development. She seemed especially sure that time in nature could help and even cure medical problems like ADHD, citing her own experience with one particular student. She claimed that after fifteen minutes outside, this particular student was able to stay focused for forty-five minutes of class time.

> I never thought about how not being around the nature all the time really does affect kids growing up in cities until I read Louv's book. They're really different from the kids I grew up with. I just never thought about how it really does effect on you if you are. The ADHD thing just really blew on my mind. Where it talks about the rise of ADHD might be due, in part, because

> kids aren't outside doing chores and chopping wood so their energy just explodes and they are really trapped. That was really interesting. I hope to use the outdoors as much as possible when I am a full time teacher to help alleviate my students' ADHD symptoms. (photointerview, 4/29/14; photoessay, 4/22/14)

Besides describing feelings of peace and the conviction that nature is necessary in child development, Emma provided examples where camp experiences contributed to helping children build positive connections with nature. She noted the benefits of Wednesday night campouts in dispelling fears of "the boogeyman" in children. *"We camp out every Wednesday night and the kids love it. Kids are able to experience nature fully with their peers with trained counselors nearby. They are able to truly experience nature and what it offers safely"* (photoessay, 4/22/14).

A sense of connectedness was expressed clearly throughout Emma's photointerview and photoessay. In terms of mindfulness, our research team has defined connectedness as "how aware a person is that what goes on inside a classroom is connected to the school, neighborhood, and larger community." For example, Emma stated,

> Self-awareness and interconnectiveness and embracing and valuing every moment are really the most important to me because I think as a first year teacher, it's really important to reflect. Then you can see what's working and what's not working so you can improve. It's an important part of first year teachers' learning, trying new things and reflecting. Another thing is that every moment is important. We all have an impact on each other, and everything has impact on us. (photointerview, 4/29/14)

Through reading Louv's (2005) book and participating in activities during the semester, Emma wrote about becoming increasingly aware of how she was influenced by her nature experiences as a child and young adult and continuously expressed conviction of the importance of helping her future students connect with nature. "Nature is a human need," she wrote several times, "not just something to be preserved" (photointerview, 4/29/14; photoessay, 4/22/14). She also emphasized, "the camp thing again because it's such a part of who I am" (photointerview, 4/29/14).

Emma described time and travel constraints of college life as a challenge in maintaining a relationship with the natural world but also shared ways she has found to overcome them.

> Since I came to college, it's been really hard to be outside. During this class, I realized that I can change it up, like when I am cooking. We have a back porch so I'll go and open the door to let fresh air in or I'll do something outside rather than sit. The spring weather helped me realize I could change these things. Besides that, I live off campus and have to take the bus to get here. But, I started parking illegally at my sorority and walking the ten minutes. It's about the same walk. Waiting on the bus and then getting to the bus stop is

> about double the time than just driving to the sorority and then I get to spend that time outside. (photointerview, 4/29/14)

Emma articulated a feeling of discovery in her photointerview and photoessay. Though she said experiences in nature had always been important in her life, she seemed to have strayed for a bit when she lived with her family as a young girl in Tennessee and again when she went to the university. It seemed like she had a reawakening of her love for nature with activities, assignments, and readings throughout this class as catalysts.

> This is my first summer not working at camp. I was going to either waitress or lifeguard this summer but I want to be outside and so I chose to lifeguard. I might waitress if I need more money but I am just trying to be more conscious of my decisions even if it's at the pool. I just … want to be outside. (photointerview, 4/29/14)

LESSONS LEARNED

The prospective teachers' photoessays showed a progression of ecologically mindful thinking throughout the semester. At the beginning of the photoessay experience, and during the photointerviews, many described their view of nature prior to the course, as typically an experiential, activity-driven pursuit. Being in nature meant doing activities like visiting nature centers, museums, and aquariums or playing organized sports. When the prospective teachers discussed and illustrated their current conceptions of nature at the end of the semester, they highlighted the importance of building relationships through nature, letting go of their former fear of nature, and feelings of restoration and healing by being in nature. Many prospective teachers also had made a shift towards environmental stewardship, proclaiming it is "our duty to bring the excitement and knowledge [of nature] to our classrooms. Nature is beauty."

While the prospective teachers embraced environmental stewardship, few of them expressed any sense of environmental agency. Instead, they claimed that something needed to be done to protect the environment, but felt helpless to know exactly what to do: "I felt like I was able to talk to my third graders about how we should be part of helping to make our world be a better place." I've tried to recycle. We used to recycle a lot at our house, but then we just kind of stopped, but I'm trying to recycle again."

All of the prospective teachers expressed some form of self-awareness, particularly in terms of what they characterized as their lack of mindfulness. One student recalled bird watching with her grandmother as a child and wished she could go back to that time, wondering what she would notice and what she would react to now. She believed she now would have a better appreciation for the birds. Reflecting on eco-mindfulness sparked bird stories for another student as well: "Before this

class, I would have been like, 'Stop!' and I would have been mad at the birds for waking me up at five in the morning and now it's kind of relaxing to me. When they wake me up, I think I could probably stay up right now. I feel like I've become more mindful of the nature around me."

The prospective teachers also described how they were overcoming their former fear of nature. One student talked about her fear of going outside at night because of El Cucuy, a Mexican folklore boogeyman. During her interview she discussed this almost crippling fear, noting "I used to go into nature really scared, I was always really scared of going outdoors at night, especially at my own house just cause we have a lot of bushes going up our drive way and that always scared me. But I feel like now I walk with more confidence even at night. Before I'd be really scared of keeping my window open at night, but I actually have done that a few nights now and I feel like I sleep better with the wind coming in."

Overall, increased self-awareness about their place in nature and shifts toward environmental stewardship were evident in the responses of the prospective teachers. For the most part, a sense of environmental agency was missing from their stories. Yet, despite that, these prospective teachers' stories, including their photoessays, survey responses and photointerviews, indicated that they made many positive changes toward becoming more eco-mindful throughout the semester. Further study of the potential role that eco-mindfulness might play in science teacher education may help us learn how to better contribute to prospective teachers' environmental agency abilities.

Developing Ecologically Mindful Teachers

Though Yolanda, Lacey, and Emma fall on different parts of Corbett's (2006) spectrum of environmental ideologies, they all expressed similar desires to share what they've learned with their future elementary students. Yolanda mentioned the importance of recycling and how she is trying harder to incorporate the practice into her daily routines. Lacey concluded her photoessay by saying "*I was not only reminded of my love and experiences with nature this semester, it also taught me ways I can instill this in the children I teach one day. I have learned that it is important to bring the classroom and the curriculum out into nature. By letting children do the learning themselves they are using more critical thinking skills and experiencing how what they are learning actually works. Being in nature lets children expand their minds; they are able to visualize things outside the walls of the classroom. We need to make sure nature is part of a student's daily school routine.*" By introducing eco-mindfulness to future teachers in science teacher preparation courses, we can help to insure that elementary teachers want to facilitate a connection between children and nature, which will in turn minimize nature-deficit disorder.

In addition, there are multiple benefits of mindfulness to the teachers themselves. Mindfulness training has been shown to reduce stress in teachers and minimize the teacher attrition rate. A mindful teacher, who is aware of his/her physical reactions

to emotions, better manages stress and, consequently, his/her classroom (Meiklejohn et al., 2012). By engaging in eco-mindful experiences, these prospective teachers are simultaneously learning mindful practices as well as more about themselves. While each prospective teacher mastered a different mindful practice, they were able to relate that practice to their future teaching. Yolanda's increasing self-awareness could contribute to her teaching by allowing her to be aware of her emotions as she interacts with students. Lacey's attention to her surroundings could make her hyper aware of her students and their needs throughout the day. Emma's connectedness could help her to view the school as a community that she can help nurture and grow.

Yolanda, Lacey, and Emma's quests for ecological mindfulness are not over. While each has heavily embraced one of the characteristics of eco-mindfulness, we believe their relationship with nature will continue to grow as they share these skills with their future elementary students. Through their experiences in nature, they can continue to practice mindfulness in many aspects of their lives. Each of these future teachers talked about the importance of social awareness, recognizing that it and connectedness were central to the classroom ecosystem. As they continue to pay increased attention to the environment they will build strong environmental intuition if practiced regularly. All of these aspects of eco-mindfulness will hopefully help them to become stewards of their environment, facilitating bonds between children and nature.

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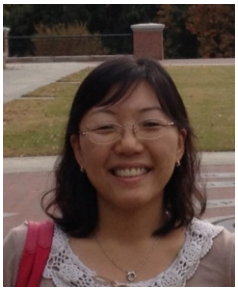
APPENDIX A

Characteristics of Eco-Mindfulness and Heuristic Items		
Characteristic	*Definition*	*Sample Heuristic Item*
Environmental Intuition	*The ability of a person to perceive and react appropriately to what is going on around them; this could include having keen senses for perceiving animals nearby*	*When I am outside, I pay more attention to moment-to-moment sensory experiences.*
Connectedness	*How aware a person is that what goes on inside a classroom is connected to the school, neighborhood, and larger community*	*I view an elementary school as part of a larger community ecosystem.*
Self-Awareness	*The ability of a person to recognize the physical conditions that reflect emotions*	*I can control my emotions with my breathing.*
Attention in the Environment	*How focused a person is on their tasks when outside*	*When I am outside, I pay more attention to moment-to-moment sensory experiences.*
Social Awareness	*The openness of a person to be receptive and accepting of alternate views and action*	*I can tell when something is bothering other students.*
Environmental Agency	*The degree to which a person feels a responsibility to act in a way that protects or preserves some aspect of the environment (including sustainable practices)*	*I work hard to reduce my daily impact on the Earth.*

ABOUT THE AUTHORS



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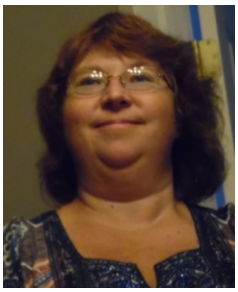

Heather A. Rudolph is a postdoctoral fellow in the School of Biological Sciences at the University of Northern Colorado in Greeley. Heather holds a B.S. from Eastern Oregon University and an M.N.S. from the University of Idaho, both in Biology. She completed her Ph.D. at the University of Georgia in Science Education in 2015. Her interests in mindfulness come from working with a wide variety of students including first generation college students in Georgia, Oregon, and Colorado, and doing hands-on learning experiences during her doctoral research at an urban middle school. Heather's research interests include rural k-16 science education, place conscious education, social justice, and ethnography.

Debra Mitchell is a middle school agriculture teacher. After completing her doctorate in science education at the University of Georgia, she was an AmeriCorps volunteer assigned to developing school gardens, a dream job that continues through her present position, combining two loves of working with nature and youth.

Deborah Tippins is a professor in the Department of Mathematics and Science Education at the University of Georgia where she specializes in science for young children. She draws on anthropological and sociocultural frameworks, in collaboration with prospective and practicing teachers, to study questions of social and ecojustice in science teaching and learning. Her recent work focuses on citizen science, socio-scientific issues, sustainability education, cultural/ biological diversity, and eco-mindfulness.

PART II

MINDFULNESS AND WELLNESS

HEATHER A. RUDOLPH

11. LEARNING MINDFULNESS ONE SURGERY AT A TIME

ABSTRACT

Using current research literature, I have written an autoethnography to illustrate my experience as a marginalized young adult with a chronic disease and contribute to the fields of mindfulness, disability, and autoethnography. In this narrative, I document part of my journey toward becoming more mindful. Baer and colleagues (2008) described mindfulness as "bringing one's complete attention to the experiences occurring at the present moment, in a nonjudgmental or accepting way" (p. 27). I have lived with rheumatoid arthritis most of my life, having been diagnosed at age three; however, I was encouraged by my family to push myself to do everything I was able to do physically and mentally. With their support, I completed a bachelor's degree in biology and was applying for teaching jobs when I fell on my knees on concrete steps. The resulting injury was exacerbated by years of chronic inflammation, which had deteriorated my knee joints so that what should have been easily brushed off resulted in a total knee replacement at age 25. The experience of helplessness was foreign to me because I had spent my life much like my "normal" sisters and friends, riding bikes and horses, climbing hills, and working. I struggled to overcome frustration, pain, and fear while becoming more mindful of others and myself.

Keywords: autoethnography, mindfulness, marginalization, disability, independence

HOW I STARTED DOWN THIS PATH

Jacquelyn Allen-Collinson (2013) said "Autoethnography seeks to connect the personal to the cultural and to locate both 'self" – however shifting and fragmentary – and others within a social context" (p. 283). Autoethnography can be used as Ruth Behar (2008) encourages, in which "the most charged intellectual insights occur precisely when one's ethnographic work and one's life crash into each other in a head-on collision, even though every effort has been made to keep them running smoothly in their own lanes" (p. 63). I had been trying to maintain my independence and progress toward being a high school science teacher but complications from a lifetime of chronic inflammation due to rheumatoid arthritis, combined with a fall on the steps leading into my parents' house, literally brought me to a standstill.

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 187–198.

Mohan Dutta and Ambar Basu (2013) commented, "Documenting marginal narratives is a political act in itself" (p. 156). This autoethnography is a marginal narrative in which experiences of a lesser-known portion of society – young adults with rheumatoid arthritis – are highlighted. It is also the beginning of a journey toward becoming more mindful. Baer and colleagues (2008) described mindfulness as "bringing one's complete attention to the experiences occurring at the present moment, in a nonjudgmental or accepting way" (p. 27). I struggle with these ideas still but as with any set of skills, mindfulness is something "that can be learned and practiced" (Baer et al., 2008, p. 27). The following autoethnography describes an early stage of my intermittent progress toward more mindful living with rheumatoid arthritis. I use current research literature to illustrate the narrative's contribution to the fields of mindfulness, disability, and autoethnography.

Chronic inflammation caused deterioration of the surfaces of my bones, which resulted in a total knee replacement when I was 25 years old. Since this knee replacement, I have had several more surgeries and yet, when I wrote this story of my first knee replacement, 15 years later, I felt like the same scared 25-year-old young woman I was while I lived the experience. Through incorporating insider knowledge, as one with a disability, I have used autoethnography to create detailed thick descriptions of cultural experiences to facilitate understanding of those experiences (Holman Jones, Adams, & Ellis, 2013). In this chapter, I describe my journey toward increasing mindfulness as I tell my story of a life-changing experience and my ongoing physical and emotional recovery from it.

OUTSIDE THE WINDOW

"1-2-3!" Mom grunts as she pulls on my arms to help me out of the chair. She steadies me as I grimace, shift my weight to my left foot, rotate my torso, and plop into the wheelchair. "Feet up!" She'd run over me if I didn't move them. She sometimes just starts to push, bending my ankles into angles they don't go.

Bump! She pushes me over the door threshold. I hold my breath, hoping she doesn't tip me off the edge of the too narrow ramp that covers the steps. "Again!" She stands in front of me with her arms out like people do with toddlers learning to walk. "1-2-3!" She pulls me up and I rotate until my butt is toward the seat of the truck, and sit. Relief for a second. "Legs in!" With a deep breath, I make the left leg move inside the cab of my white S-10 pickup truck. Another deep breath and I lift my right leg in. Mom closes the door with a slam and 10 minutes later we park at the swimming pool and repeat the procedure of lift, rotate, plop, to get me from the truck into the wheelchair. Mom pushes me through the lobby. We pause in the dressing room where she helps me pull clothes off to reveal my swimsuit. A quick rinse in the shower, another transfer to the sling that lowers me into the water, and I am free.

In the buoyant water of the city pool, I walk laps back and forth. Floor to ceiling windows let me see a blue sky and a green-brown lawn alongside the paved street.

Several years ago, my sister and I rode our bikes over every day to check on the progress of the pool being dug. A pool! Only three minutes by bike from our house! The flash of my white truck past the pool's windows tell me Mom is back. It is time for me to leave the weightlessness of the water and go back to gravity. I'm not ready. I am never ready.

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Faded brown and yellow leaves bob as rain drips onto them, just outside the window of my parents' house where I live. Sitting in a wooden glider, because it is one thing I can do without help and without pain, I watch the leaves, thinking of O. Henry's short story, "The Last Leaf." I tell myself, *You're not dying. Sitting here is temporary. You'll feel better soon. It has to get better.*

A few months later, pale green spring leaves appear on the bush by the window, Matlock is on TV. I dream about riding Tink. Racing bareback across town alongside my older sister's horse, I feel Tink's muscles bunching tightly under me as her short legs work hard to keep up with my sister's larger horse. I wake with a smile until I remember where I am. *There is no riding, no racing for me. No bicycling … Is that all I get? I'm 25 years old, with a college degree, for Christ's sake. What good did that do me? Is this my life until I'm dead? Watching leaves and Mom helping me make every move?* I look at the TV, watch Oprah, and will myself to stop remembering.

***

Lift, rotate, plop into the wheelchair and roll out the door. Today Mom's driving me to see a new doctor. I grew up roller skating, playing in the mud, swimming, and doing everything my sisters and cousins did. Surely there is a way to walk again. I'm not ready to be an old woman.

***

"What would you like to be able to do?" New Doctor asks me, after shaking my hand. I can't remember a doctor asking me what I want to be able to do. I can't remember a doctor shaking my hand gently, like he knew it would hurt if he shook it like he would anyone else's hand.

"I want to ride horses again," I blurt. A tear forms but I won't let it fall. I've probably already made a fool of myself, a girl in a wheelchair who can't even stand and she wants to ride horses.

New Doctor smiles at me. He reaches for my hand and gently lifts it. Range of motion is what he's checking. I'm very familiar with this test, having spent most of my life in physical therapy. He sets that hand down and checks the other.

Every joint in my body is messed up. Every time I go through range of motion checks, I feel like a failure because I can't be "normal." There has been a slow, steady progression of destruction in every joint. People who meet me now assume I've always been in a wheelchair and can't walk at all. They say things that piss me

off and talk to me like I'm retarded because I'm sitting in a wheelchair. Last week some old lady watching me get out of the pool asked the lifeguard, like I wasn't right there listening, "Is she ok? Can she walk all right? It scares me to watch." I felt like saying, "Then don't watch, you old turd!"

"Tell me about riding horses. You have in the past, I take it?" He asks me, still talking to me, as if I matter to him. This is a new experience for me at a doctor's office, being treated like an adult. Diagnosed at age three, I have always gone to a pediatric rheumatologist. I had been afraid to come here, to yet another doctor, but maybe this adult rheumatologist would be all right.

"I used to, but the last time I rode it hurt so much that I had to get off after a few minutes."

"I'll need to see the x-rays, but, I suspect, that you'll want to do a total knee replacement. What do you think?"

"Dr. Harris, my other doctor, told me to wait as long as I could, because I'm so young and the knees would just wear out, and I'd need to get them replaced."

"That's what I would say too, but you are young, in pain, and my job is to help you live. If I can help you with a surgery, then I think you have waited long enough." He shakes my hand gently again after making sure I don't have any more questions. Then he thanks me and says it was nice to meet me before quietly walking out the door.

***

I'm sitting by the window at home a week later. I have received the results from the lab tests and x-rays. Inflammation has decreased according to my blood tests but x-rays show bones grating on each other. No cartilage is left to protect them. The new medicine has helped me feel a little better, but when I stand it still feels like a nerve is being pressed between two pieces of sandpaper. A list of reasons to do the knee replacement and a list of reasons not to do it are sitting on my lap. Is this how I will spend all of my 20s? I'm supposed to be out getting drunk and having sex. Isn't that what people do on TV? And in the movies? And in books? In a few years, I'll be 30. The longer I put it off, the weaker the muscles will get from disuse, and the harder it will be to get over it. I write a list of questions to ask when I go for a consult. The risk is worth it. How much worse could I possibly feel?

***

I've read about the surgery and the orthopedic surgeon answered all of my questions. I'm very intrigued by the process. If it weren't going to happen to me, it would be fascinating. After all my training in the absolute authority of science, why am I hesitating to do it? Because in my lifetime of doctors and hospitals, science has failed me repeatedly. Despite that, I hope this will be the "magic bullet," but I am afraid to hope for too much.

The knee replacement, left knee only, will take place in two days. I picture myself on a horse again. I'm on Danello, Mom's bay Arabian who is so easy to ride; it feels like I'm floating.

***

I barely slept last night. It is the day of the surgery and I am in the waiting room at the hospital. My mind is a tornado of negativity. All I can think about is them, the doctors, sawing me into pieces and throwing those pieces into the garbage can. I understand the science of it but this messed up body is all I've ever known and throwing pieces of it away is very hard for me to submit to. *No!* I want to yell. *I didn't ask for this! I want to go home! I want to be anywhere but here!*

The nurse calls my name. Mom stands and pushes me in the wheelchair as the nurse leads us to the pre-op room. Behind the curtain, Mom helps me change into the hospital gown and lie down on the bed. She covers me with a sheet just as another nurse comes in to start the IV. The smell of alcohol reaches my nose as I feel the coolness of the swab on my arm. She finds a vein surprisingly easily, only one needle stick.

Soon it is time to be rolled into the operating room. Mom is only allowed to a certain point down the hallway. She hugs me and says, "See you soon. You'll be new and improved." I try to smile as I hug her back. New and improved would be a nice change.

"See you soon, Mom." The nurse waves to Mom and then pushes me through the doors. It's time.

In the operating room, I recognize my doctors' faces and feel relieved to see someone familiar. The anesthesiologist tells me to count backward from 100 as he places the mask over my nose.

***

Physical therapy starts the day after the surgery. I am surprised when a therapist comes in with a wide beige strap and says, "Let's see how you feel about standing."

"Now?"

"Now. I'm going to wrap this strap around your waist for support. Your hands are not strong enough for crutches. So I brought a walker with arm rests."

I see the metal monstrous frame in the corner. I had to use one when I recovered from a knee arthroscopy two years earlier. It was embarrassing to scoot around with it like some old lady in a nursing home. But he's right. My hands can't manage crutches.

The therapist fastens a heavy canvas strap about three inches wide around my waist, snugly. I stand cautiously. The strap tightens around my waist as he grips it securely. It didn't hurt to stand. What?! It doesn't hurt to stand! "It doesn't hurt!" I really don't believe what I am feeling or not feeling, actually. The therapist chuckles.

"Try taking a step. Let's see how that feels to you." I lean on the armrests and take a step with my new leg. It feels numb and heavy but it doesn't hurt.

***

It has been two days since the surgery. Mom is standing by my bed when I open my eyes. She looks anxious. "Dr. King is here to talk to you."

"Hi," my orthopedic surgeon says, "I hear you've been walking already. How'd that go?"

"It was great! I don't know how long it's been since I've walked that far!"

"We're going to keep you here for a few days and then we'll send you to the Elks Rehab unit. They'll help you until you're strong enough to go home. I'll stop by tomorrow then and see how you're feeling." He shakes my hand and leaves in a flurry of white lab coat.

Each day I walk a little farther. Four days after the surgery a nurse wheels me down to the rehab unit. Mom has driven home after making sure she can find me when she comes back to visit in a few days. I am alone. Everything familiar in my whole life is over 100 miles away. I am afraid something will go wrong. I haven't been without Mom's help for so long. I am afraid but I am hopeful.

Resilience, a characteristic of mindfulness, has been defined as "how quickly a person recovers from difficult times" (Powietrzynska, 2015). I hesitatingly agreed to see yet another doctor despite feeling that previous doctors had been ineffective and then weighed the consequences of major surgery at such a young age, compared to the consequences of no surgery. Self-awareness is another characteristic of mindfulness and is described as "the ability of a person to recognize physical conditions that reflect emotions" (Powietrzynska, 2015). It was the beginning of my journey toward acceptance of my physical condition, and by beginning to accept it; it was also the beginning of changing my emotions toward my condition.

***

My leg is in an immobilizing brace except when I am on the CPM that keeps it moving. CPM, or continual passive motion machine, is an electric machine that my leg is strapped into which slowly moves my knee for me for hours every day. Bend, straighten, bend, straighten. When I make progress, it is adjusted to bend and straighten just a little more. So I can gain as much range of motion as possible. I hate that machine. It hurts to push myself this hard, bending it to 85 degrees, straightening it to 15. I am determined to do everything I have to so I can walk out of here, well, to walk, period, but I hate that machine!

At 6 am on my first morning in rehab, a nurse turns the light on and announces it is time for my belly shot, to prevent blood clots from forming. It is important but annoying. "Dining room is across the hall. Think you can walk that far or would you rather have a ride in the wheelchair this morning?"

"I want to walk."

"Ok, hold tight just a minute. I'm going to take the wheelchair over there so you have a place to rest your leg while you eat. Then I'll be back to help you." It's like having a baby to take care of. Everything I do centers around carefully handling my leg, keeping it supported, stretching exercises, strengthening exercises, and walking. The responsibility is intimidating.

The nurse is back and fastens the strap around my waist. I walk across the room, one step with my "good leg" and one step for the other to catch up. It's hard for me to believe that it's ok to put my full weight on the leg that has just been cut apart and reassembled.

I feel beads of sweat form on my forehead. Who knew it could take so much effort to walk 20 feet? Another nurse brings a tray of food to me after I am sitting comfortably with my leg supported by the wheelchair. Other patients shuffle and roll in for their breakfasts. They are all so old! This is a rehab facility for people who have just undergone knee and hip replacements.

I look at the tray of food, which includes oatmeal, toast, strawberries, coffee, and milk. I want coffee, usually a staple in my mornings, but my stomach has been violently protesting everything but water and 7-up since the surgery. One of the new nurses in the hospital hadn't responded fast enough when I said, "I need the TUB, not the little barf pan," and the barf splashed out of the pan onto her. I warned her.

Therapy is after breakfast and starts with ice for 20 minutes on my knee to numb it and reduce swelling before stretches started. The therapist, Peter, says my goal is to be able to go up and down three steps, to get on and off the toilet, get in and out of a makeshift shower area, and to get dressed, all of these things by myself. It seems like I should be out of here in a week. I hope. There are two good things about all of this. I can't eat much so I am losing weight. I like to spend time outside when they aren't torturing me with exercise or food so I am getting a nice tan.

***

It is a week after surgery. I am 25 years and 2 months exactly, and I am in rehab because I can't walk by myself. Life is not fair.

I can do three straight leg raises without help now. Three! Will I ever be able to walk without a walker?

***

It's been almost two weeks now since the surgery. Peter took the leg immobilizer off and didn't put it back on a few days ago. My leg feels very vulnerable, but I have to trust him. Every little bump worries me. What if I put too much weight on it and break it? What if I slip and bend it sideways? What if … well I don't know what else could go wrong, but it is scary to have my new leg exposed where anything could happen. Physical therapy sessions are a time of attention or "how focused a person is on the present task or situation" (Powietrzynska, 2015). I am very focused during physical therapy because I want to accomplish

certain goals. First, go home to a familiar, comfortable environment and second, to ride horses again.

***

It's been a little over two weeks now since the surgery. I thought I would be walking much better by now. I thought I would be home. It turns out that the bone shattered during the surgery, which resulted in a lot longer recovery time, well, that and my muscles being very weak.

I feel like I have been here for an eternity. Everyone else stays for a week or ten days and goes home. Me? I eat, sleep, exercise, and stay another week. Being confined is one of the hardest things I've ever done. Today is June first. How will I feel in six weeks? Will I be able to walk down Main Street during the Miner's Jubilee celebration? Will I still be using this stupid walker?

I am making progress, doing 20 leg lifts now at a time. Last week I was only doing 15. I've lost a little weight. The dietician actually checked in with me because she was concerned. I thought that was hilarious. Doesn't she know that throwing up at the smell of food greatly reduces a person's appetite and after two or three weeks? Yeah, I lost weight.

***

Sensitivity to context is defined as "how well a person can regulate their emotional responses to include the environment they are in" (Powietrzynska, 2015). Despite realizing that other patients are also struggling with being in rehabilitation and perhaps have some of the same fears and frustrations I do, I often feel unsympathetic to one in particular who I describe next.

***

A new inmate arrived. Her hair is dyed black and not very well. She has a big white spot on top. I know I'm being mean and I know it's hard to be here but she's such a whiner! She cries about everything. "The ice is too cold!" Of course it's cold, you fruitcake, it's ICE! If you'll shut up and let it freeze your knee, you'll be thankful. It'll keep the exercises from hurting so much.

My roommate is going home. I am happy for her, but I wish it were me. Even though some of the nurses, like Jesse, are great, some of them make me feel like a turd stuck to their shoe. It's not like I try to wake up during the night so they have to help me get up and go to the bathroom! It's not like I try to get sick or bleed on things! Don't they know how much I want out? To go back to my life? To feel better?

***

Finally, it's my turn to go home! I would love to go RUNNING out of here on Friday! But of course I can't run or even walk without the walker and can't drive and Mom has to drive over from Oregon and can't be here until the afternoon so I will just be sitting outside, waiting. Alone.

***

I am home and walking more than I did at rehab. One month after the surgery I have gone from one foot per day of walking to about 360 feet, with a walker. I can't get up from a chair by myself. I have to use the CPM for four hours each day. I had to wait for the scar to heal completely but should be able to start exercising at the pool in a couple of days. Bailey, my older sister, is getting married in about six weeks. I hope to walk down the aisle as a bridesmaid. I'm making progress but not enough. It's never enough …

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A RESTORY: JOURNEYING THROUGH SELF-CENSORSHIP INTO MINDFULNESS

My outlook changed slowly, grudgingly, as I worked harder and longer than I had anticipated to gain very little strength and to continue struggling with what I had once considered simple tasks such as getting off a toilet or getting in and out of a shower by myself. Powietrzynska (2015) described mindfulness as a process. The first part of becoming more mindful is becoming aware of current experiences. As I re-experienced my time at the rehab facility through writing it, I recognized signs of the first stage of mindfulness. For example, after a lifetime of feeling (most of the time) physically active, having to stop and become aware of every step I took was emotionally one of the hardest things I have ever done.

Throughout several more surgeries, I began to practice increasing awareness of my emotions and how I was reacting to physical conditions, including other people in my environment. My mother gave me a boost in this direction when she suggested it was time for me to leave the pediatric rheumatology clinic and see an adult rheumatologist. The choice I made to go to the new doctor and his support for me in this and many ventures changed my life. I remembered his frown when I triumphantly announced that I had been riding again. He said he was happy for me and then added, "For my sake, don't fall off!"

Another part of mindfulness, viewing those experiences without judgment, is more of a struggle for me (Powietrzynska, 2015). I indicated this in my mention of the woman at the swimming pool whose comments made me feel badly about my appearance and my awkward walk. Carolyn Ellis and Arthur Bochner (2000) said we write "to make a life that seems to be falling apart come together again, by retelling and restorying the events of one's life" (p. 746). The knee replacement surgery occurred when I could no longer walk, when I felt powerless because I had become so dependent on others' help. During this period of my life, I had to slow down and become aware of my experiences and learn from them or possibly lose my independence for the rest of my life as muscles and joints continued to weaken from disuse. I had to learn to live with rheumatoid arthritis. By doing so, I have taught other people about living with it through conversations about understanding disadvantages that people with impairments experience. For example, when I speak

to a class of students for the first time, I always tell them briefly, depending on their age and interest, what is "wrong" with me. I use my experiences in what I hope is a non-judgmental manner to explain my obvious physical differences. My experience in doing this so far with ages ranging from fifth grade to middle aged people is acceptance. Bill Hughes and Kevin Paterson (1997) argued that the importance of seeing disabled bodies is that the body is an experiencing agent and therefore a site of meaning and a source of knowledge about the world.

This autoethnography builds on and contributes to work in ableism and disabled embodiment in disability studies, both of which involve censorship by ignoring the disabled community (Smagorinski, 2011). Craig Gingrich-Philbrook (2013) said, "Censorship, after all, performs the harshest evaluation of a life story. It says, 'we would prefer it if you did not exist to tell your story, so we will create the artificial appearance that you have vanished'" (p. 13). Censorship as a form of judgment again ties to a theme of becoming mindful. While I was in the rehab facility, I became aware of a form of self-censorship when I found myself upset at being with a group of old people. I was 25 and indignant to have been betrayed by a body that resulted in surgery and rehab at that time of my life. In learning to be more mindful, I practice recognizing these thoughts about myself and being more accepting. A professor explained it to the class as, "People are people and people are different."

Studies have used the medical model of disability to describe effects of disability (Defenbaugh, 2008). The social model of disability has focused on overturning the medical view of disabled people as being identified as needing to be normalized or corrected (Hughes & Paterson, 1997). The social model of disability assisted in advances in bringing awareness to able-bodied people of difficulties in daily lives of those living with disabilities (Loja, Costa, Hughes, & Menezes, 2013). It "emphasizes social, economic and environmental barriers" to societal participation (Burchardt, 2004, p. 735). For example, I expected to be labeled as a "failure" again when I met the new doctor because I was unable to perform the full range of motion when he checked. Fortunately, he did not make me feel the need to be normalized. Instead, his comments were positive toward my future and focused on what I wanted to be able to do, rather than what he may have wanted me to do. While there is research from medical and educational professionals' points of view, there is much less empirical research from the point of view of the person with physical disabilities, particularly during a critical life event.

I moved from Oregon to Georgia in 2011 where I began a PhD program in science education and, as my dad often tells me, "it's a steep learning curve." I consciously implement mindfulness into my daily life as I struggle with this latest self-inflicted learning curve. During a recent slump in my mindfulness quest when I was questioning (again) my sanity in attempting this degree, a friend summed up the doctorate process for me. He said that getting a PhD is "not just about writing

a dissertation, it's about learning a new lifestyle." I would argue that incorporating mindfulness is also "learning a new lifestyle" and according to Malgorzata Powietrzynska, Kenneth Tobin, and Konstantinos Alexakos (2015), a healthier lifestyle.

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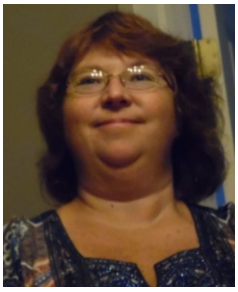

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PETER WALDMAN

12. IT'S NOT ABOUT ME

Bob D. and the Ethics of Alterity

ABSTRACT

For Bob D., 'surrendering judgment' is the essential and ongoing action of the AA newcomer. Surrendering judgment is also an aspect or characteristic of mindfulness and mindfulness-based practices such as meditation, which is 'suggested' along with prayer in AA's Eleventh Step. Bob D.'s ethical commitments are demonstrated by his "primary purpose" ethics (Anonymous, 1952): to help others even before helping himself, which is a productive analog toward understanding Emmanuel Levinas's (1969) "ethics of alterity" (positing one's responsibility for the needful other as preceding the ontological). This chapter is a fictional "impressionist tale" (John Van Maanen, 1988). It is auto/bio/graphical and library research pretending to be *in situ* ethnography disclosing the elasticity of AA's knowledge system. It also reveals implicitly, in its method and methodology, that non-empirical, artistic modes of knowledge production in narrative research are viable forms. In AA, the return to a 'true' sober self from one of addicted fragments partly takes the form of a deeply structured narrative 'qualification' ("what we used to be like, what happened, and what we are like now" (Anon, 2001, p. 58)), which, if "appropriate" (Carole Cain, 1991), is expressive of new beliefs, values, knowledge, practices, and is structured according to the temporal/ontological specifications listed above. The audio file for Bob D.'s talk, titled "Surrender," has more in common with a speech than an AA qualification. It was given in Denmark in 2007 and found on an AA-themed Youtube channel called Odomtology 12-Step Recovery Media. I downloaded the same speech from a different site, www.xa-speakers.org and transcribed it using ExpressScribe software for Mac. The following is a fictional account of Bob's speech in a fictional AA meeting, fashioned from the twenty or so I attended in earnest to (re)mediate a serious addiction to prescription painkillers. The methodology of the impressionist tale is "braid the knower with the known," (Van Maanen, 1988, p. 106), or to draw the reader into a textually constructed 'world', revealing reflected upon lived experience as narratively structured, and using literary rather than disciplinary standards and conventions as criteria, e.g., story structure (plot), characterization, verisimilitude, voice, and other prosodic conventions and forms. Like narrative literature, the aim of the impressionist tale is to animate and breathe life into the landscape and action of an event or series of events (again, a plot

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 199–212.

or story with a beginning, middle, and end, which is Aristotle's (1982) prescription for a well-made play). The narrator, an *I* with two *me*'s, is both a newcomer addict in AA in the narrative proper, and an academic researcher in the notes section after the narrative, with the lines between the two impossibly blurred. The chapter is 'me-search' more than anything, and makes no claims for generalizability except for the storied nature—the historical fiction of narrative identity as Paul Ricoeur (1992) termed it—of reflected upon lived experience.

Keywords: addiction, mindfulness, narrative, ethics, alterity

> Looking back to when I began drinking, I can see that I was no different from those others who say they drank to make themselves agreeable, lovable, clever. We drank to spawn new selves, to be reborn in Possibility, more charming, more persuasive, more resolute, more high-spirited–until at last our new selves swam away and lost themselves in the darkness and silence of the bottom.
>
> – "Elpenor" (1986)[1]

> […] metaphysics is enacted where the social relation is enacted […] The Other is the very locus of metaphysical truth, and is indispensable for my relation with God.
>
> – Levinas (1969, p. 78)

> It's not about me.
>
> – Bob D., Copenhagen, Denmark, May 4th, 2007, from "Surrender," retrieved June 2014: www.xa-speakers.org

WHAT WE USED TO BE LIKE

My ass is numb from sitting too long but I'm a good boy and remain in my seat. Time is frozen here in this church basement, like my thoughts, like the icy branches of the question mark-shaped oak (now that I think of it) out front, standing sentinel these last eleven or twelve decades. When time begins again, blinkering in startled fits of form and light, my attention is drawn to the front of the room where the movement of bodies in space and the wind and brass of voices are concentrated. In the back row closest to the door, I am slumped and broken, self-pitying and proud, alive and dead.

A rather large, middle-aged man, white, in jeans and a grey dress shirt thanks Evelyn, 'chair' for the evening, as he settles into the folding seat behind the tiny blue desk, which shrinks even further beneath his hulking presence. He could be a castaway Gulliver in Lilliput, or an elephantine Alice after a drink and a bite to eat.

Upon the desk's splintered corner, the daisy dangles from the lip of the parched vase. He lifts the flower, holding the delicate stem between an enormous thumb and forefinger, and smells its dead aroma. He fills the vase halfway with a plastic cup of clear water brought from the fountain by the toilet and drops the daisy in.

In my vulnerable state—two and a half days cold turkey and humming like a power grid—I am humbled by this simple gesture of care, however futile. I half expect the dead thing to bloom again, like in *E.T.,* silvery petals spontaneously blossoming and golden eye ablaze, but no such luck.

The large man calls out from behind the desk: "My name is Bob and I'm an alcoholic."

As in all AA meetings, the object is talk, discourse, the naming and cataloguing of things and beings: alcoholic, addict, addict and alcoholic, cross-addicted.[2]

The group responds in unison: "Hi Bob!"

Bob's boulder-like knees hug the sides of the desk.

"I didn't come from an alcoholic home," he explains. "My parents weren't addicts or alcoholics."

The room murmurs a mutually derived understanding, although some, like me, remain silent.

"Yet ever since I can remember," Bob remembers, "I've had an alcoholic's unquenchable thirst. A kind of desperate yearning, a feeling of chronic incompleteness. I cannot recall a thought or feeling during childhood and adolescence of *being a part of*, of *being integrated with others and with the world.* I was 'restless irritable and discontent' as far back as I can remember."[3]

That's a self-assessment that rings true for this self, too. As a pre-teen I washed my hands every fifteen minutes. I checked the gas knobs and the door locks, always in patterns of three, a short-wired waltz of involuntary impulses. My parents paid 65 bucks an hour for a psychoanalyst to posit that my symptoms were the externalized manifestations of unsettled conditions: a painful divorce, abuse at the hands of a troubled older brother.[4]

"No matter what I did," Bob says, "I didn't measure up. And nothing I could do brought me to a place where I felt like my friends felt, or how they seemed to me to feel by looking at them."

I imagine Bob's friends as he describes them: leather jackets and switchblades, greasy ducktails, antiquated rockers. As Bob's story unfolds, a delicious mixture of identification, *schadenfreude*, rubbernecking, and something like the emotional equivalent of pleasure/pain courses through my body like a stimulant. I straighten up.

"Stupid kids," Bob explains, "we broke into somebody's house and we stole some bottles of whiskey. Now I'd never even seen my parents *drink* let alone drunk. But when you're coming from behind and you're a pretend human being you watch people. And I'm seeing the bigger hit you take off the Seagram's bottle the more attention you get from the guys. I mean I would've drunk anything, I would have been up for anything because I wanted their approval.

"At first it felt like my insides were on fire," Bob reflects as if it were minutes and not decades ago, his eyes bright with the anticipation of intoxication. "Then, after a couple of seconds the burning stopped and something happened to me that would change the course of my life."

Yep.

"I started to feel *so good* and so *a part of*, and so *integrated with* those kids for the first time. For the first time I could come out and play. For the first time I could just relax."

Bob exhales the word 'relax' as if everything that preceded its utterance was strangled and blue in the face.

"From then on the effect of alcohol was the thing I yearned for. It was the thing I shoplifted for. It was the thing I acted tough for. It was the thing I smoked cigarettes for. It awoke something in my spirit and it transformed my being root and branch. It enabled me to fit in with you."[5]

There is a self-awareness about Bob that I find…intoxicating. I creep toward the edge of my seat, my fist supporting my chin like the stereotypical thinker (by way of Rodin). Still, I keep a guard up for any bullshit that might float my way. Bob will describe this as my judgment, my opinion, my will, and, rather grandly, as my *self*. If I'd just suspend these mental structures and processes for the rest of my miserable life then I should be in good stead for a rewarding and fulfilling existence. Not necessarily a happy existence—"because," says Bob, "we didn't get well by the grace of God to be happy; we got well to help other suffering alcoholics"—but an existence that's productive and worthwhile and gratifying and rarified in the heady air of spiritual reward and delight.

Still, the first time is a thing to remember, like your first kiss or your first romance: a genuine love story.[6] Craving keeps you coming back: a goose chase, it's been said, for that first high which is, as Bob explains, the first time you felt connected and integrated with yourself, with others, and with the world. The subject/object duality is finally collapsed, if only for a moment and without your knowing it, and you're a kid again, without malice, hungry with desire but egoless somehow.

I remember it romantically, an inherited tic. Think of Coleridge and Baudelaire and Hendrix and Morrison.

"Seventy-five milligrams, Demerol," the ER nurse says officiously before sticking the meaty flesh just below my left shoulder.[7]

How exactly does this stuff work? Warm floods of feeling gush to the surface of my skin, bubbling with blood-pulsing life. The world spins in a scrim of milky light. The crumbling yellow paint is suddenly flecked with gold. Everything shimmers; shouts become whispers, which become soft echoes. Voices slow to gentle murmurs. A fish tank, gurgling water. Everything passes…the slow gurneys rolling, the orderlies mopping slop from the linoleum, the x-ray of my humerus bone on the light board, like a twig snapped in two. How interesting. How. Interesting.[8]

Even the attending physician is impressed: "How the hell did you do *that*?"

"Softball," I mutter. My voice sloshes around in my head like jelly.

I'm snuggling up against a warm, furry beast, a bug-eyed monster whose shark's teeth and tiger claws scratch at my belly benignly, which is what I'm doing with the nails of my one good hand: The Junky Scratch. This stuff was made for me.[9]

Then they send you home, prescriptions coming out of your shirt sleeves, and you're kind of just hanging out, swallowing one every two hours or three every two hours or four every three hours. Calling in for more like a junky Oliver. Then dependence kicks in and you're watching the sunset from the surface of the moon. You're craving more and more, not only to dull the phantom pain, nor to feel that original warmth and light, although that's the common enough line, but merely to endure the darkness and cold of what you've become. You'd be shocked if you weren't so sedated.

Bob D. continues: "So I'm in jail waiting to see the judge and this guy named Woody brings in an AA meeting. And Woody… Well, I don't really like Woody."

This breaks the room up all out of proportion. I don't get the obvious humor.

"Woody is one of those guys that got sober, and he's got the big house and the brand new car and the wife and the kids and the great job. He's so happy and he's grateful for everything and he just can't help but rub it in my face."

This bit of gentility is what passes for irony in an AA meeting. The room belongs to Bob. If he were a comic he'd be 'killing.'

Tessa is hiccupping guffaws in profile, as is Paul, the corner of his curly-cue grin an apostrophe. Evelyn is delighted and has her hands clasped over her mouth in almost exalted anticipation. All I can see of Mike are the snowy crests of his mountainous hair (God bless him) but I'm certain he's laughing, too. Or at least smiling.

The old Sesame Street song occurs to me: "One of these things is not like the others/One of these things just doesn't belong." I'm like Bob. I feel very definitely *not* a part of this thing.

"Woody was creepy," Bob continues. "Woody was something and somebody I didn't understand: an inexplicable phenomenon. You see, Woody was happy *and* sober…at the same time for God's sake! And I don't get that. Because I stopped drinking and abstinence feels like I'm doing time."

Yes.

I know what he means! I think I know what he means! But I want him to say more. Is this me "finding the similarities" as Bill prescribed?[10]

"So here comes Woody with his minions—into jail!—to try and fix us. I don't need to be fixed. I need somebody to get me out on bail. So I go up to Woody and I ask him if he'll help me out.

"That's why I'm here, kid," Bob says acting Woody's part, "I'm here to help."

"I told him I needed him to put his house up."

"Woody laughs," Bob says laughing, the room laughing with Bob and with Woody laughing at 'what [Bob] used to be like.' "But seeing I'm in earnest Woody says to me, 'I'll tell you what, kid, I'll help you with the Steps.' Then he gives me a Big Book. I decide that Woody should screw himself."

"I don't need your help," Bob says to Woody, "I'm going to beat this."

"Woody's smiling at me. He's not taunting me but it's like he's heard it all before. So I reiterate: 'I'm going to get out of here and I'm going to get in a good recovery house not like that other shithole.' Remember, folks, I'm in *jail*. I tell him: 'I'm going to get some money from the government. I might go to school. I might be a doctor, or maybe a lawyer.'"

"Woody's looking at me and he's shaking his head and he's laughing and he says, 'Kid who are you kidding? You're not going to do any of that. You're not even going to stay sober. You're probably going to die of alcoholism because you haven't hit bottom and you haven't surrendered.'"

"And I thought to myself, 'how dare you say that? That's the most negative thing I've ever heard. Where is the AA love I've been hearing about?'"

More irony, and the room rocks with laughter.[11] I imagine a giant red balloon—because red signifies guilt, shame, and embarrassment as in blushing, but also anger and rage as in *seeing red*—and the air is slowly seeping out of this enormous gravity-defying balloon. And all the shame and rage, all the humiliation and guilt is seeping out of it, and you hear that squeaky, nearly flatulent sound, and all the self-annihilating feelings at past transgressions are metabolized and excreted like a funny fart in the wind.

"I mean, I don't need this negativity, man," Bob says, "I need positive reinforcement here. Haven't surrendered?! Surrender what? There's nothing left of me!"

I Hear You, Bob

Bob says, "Woody says, 'there's only one thing that stands before you and all the abundance of the world…'"

The group waits in suspense for Bob to scribble his prescription across the face of the evening.

"You have to surrender your judgment. You see, I can't identify with you because I can't stop picking you apart. And those of you who have lived with these defense mechanisms, you know that it really makes you feel even more separate and apart."[12]

I'm certain Bob's talking directly to me, at me; he sees me picking him apart. A wave of paranoia rolls through my guts. From identification and recognition to abject terror in five seconds flat.

Surrender my judgment? Absolutely impossible.

WHAT HAPPENED

Bob describes "what happened" that he found himself in AA: the middle portion of the qualification.

He was brought before a judge who cut him a break. Instead of two years in maximum security, he's sentenced to treatment. But he can't stay sober in there

either. He's got 'friends' on the outside bringing bottles in. He's on the run now. The cops are chasing him. He's living on the streets. Imagine that. A nice boy like Bob with sober parents who loved him very much.

It's a small bridge but it's big enough. Any bridge will do, really, if you're drunk enough. A self-identified economy drinker, Bob drinks cheap wine only. Even his last drink would be way below bottom shelf. Wine that's never been within a hundred miles of a grape. Pure grain alcohol with food coloring. No viticulture whatsoever.

Cheap wine and bridges mix well only under suicidal conditions. He's trying to summon the courage to jump because he's in a trap and there's no way out but the freezing river water below. He imagines it filling his lungs, and the iron weights in his pockets pulling him down against the current.

But he can't do it. He can't do it. He thinks himself a coward.

Ten days later he wakes up in a hospital bed.

He was so sick, poor Bob, he hadn't anything to eat in days, and his face was covered with sores from exposure.

They sobered him up physically. Got him on his feet so he could attend meetings.

He must've surrendered, or hit bottom, or whatever Woody said had to happen because something had changed inside him, and he realized it when he walked into his first AA meeting which was by no means his first AA meeting. He didn't understand what had happened to him, but it didn't matter. The voice inside his head that ran the critique of everything had gone away, and he was present in the moment. A miracle.

For the first time in his life he identified with the members of Alcoholics Anonymous.

"I could finally hear you!" he says exuberantly. "And all it took was surrendering my judgment."

This is 'what happened' to Bob. This is how he found himself in AA.

WHAT WE ARE LIKE NOW

I'm a little troubled over the notion of surrendering judgment. Exactly to whom (or *what*) am I surrendering it?

To my 'Higher Power,' of course, of which I have yet to form a concept.[13]

Bob launches into a story. It's a Buddhist story, he says. In point of fact it is Taoist:

'The Horse That Ran Away'

> Once there was a farmer whose horse ran away. His neighbor came by to express his sympathies only to be told in return: 'Who knows what is good or bad?' The farmer was content.
>
> The next day the horse returned, bringing with it eleven wild horses.

> The farmer's neighbor returned, this time to congratulate his friend only to be told again: 'Who knows what is good or bad?' The farmer was content.
>
> The next day the farmer's son tried to tame one of the wild horses and he fell off, breaking his leg.
>
> The neighbor came by to mourn the farmer's fate, but for the third time all the farmer said was: 'Who knows what is good or bad?' The farmer was content.
>
> Now, the king has started a war and tomorrow soldiers will come to draft young men into the army. Because of his injury the farmer's son will not be conscripted.
>
> The neighbor returns to celebrate the farmer's luck, but is met once again with the now common rejoinder: 'Who knows what is good or bad?' The farmer is content.[14]

By relating this story Bob implies that to surrender judgment is to live in the moment. What he doesn't say is that to live in the moment, comfortable in the knowledge of not knowing, is to live *mindfully*, an observer of experience rather than an interpreter or mediator of it.[15]

But Bob is a member of AA. Why am I sitting here waiting for the gentle, almost watery sound of temple bells? Why do I imagine the monk's chanted song in my leapfrogging mind? And why am I more willing to sense these phenomena than I am to heed the message as Bill and Bob intended it?[16]

"I'm not the guy that's at odds with religion anymore," Bob says plainly. "As a matter of fact every religion from Buddhism to Hinduism to Islam, I can look at their literature, and I can see pieces of my own spiritual experience in those ways of life.[17]

"But still, it's always one step forward and two steps back, my judgment re-metastasizing like a cancer. It wasn't until I had four or five years of sobriety that I was able to approach the issue of judgment non-judgmentally." I imagine Bob advancing on a mass of dark and formless clouds.[18]

"You live a lot of your life up here in this unsurrendered control center," he says, pointing to his finely shorn silvery head, "trying to run the whole damn universe from up here in this three pound gob of flesh."

"Now if you're simmering said flesh in a nice vodka and Percocet sauce then it's not so bad, but if you're living stark raving sober you've got a problem. I'm trying to surrender my *will* and my *life* to the care of God [Step Three] but I'm retaining my will because I haven't done the work to dismantle this judgment machine that is my will."

"Could I get off my throne of judgment and get humble and honest with myself? Other-centered rather than self-centered?"

"Can I see myself in that person, in the other? Can I know that they just might be sick, just like me? Can I be kind and loving toward that person?"

The Big Book says to be kind and loving toward all.

"Can I be a kind and loving toward all?"

TWO FABLES

I've recognized the similarities and discarded the rest, as Bill advises. That's not true actually, but Bob did have something to say to me, even if he doesn't know it. Of course, I'll blow it in a few minutes when I'm asked to share, but I'm blissfully unaware of that now and so is everybody else here in this place and in this moment.[19]

'The Lesson of the Chair'

Bob narrates: "When I was brand new in sobriety this guy Joe came up to me after a meeting and said I needed to take Step Three."

"I looked at this guy and I looked at Step Three on the wall and I said, 'Joe I can't take Step Three.'"

"And why is that?"

"I said, 'Well, I don't understand *God*, Joe. I don't even know if I believe in God. I mean I'm praying, but I don't really *know.*'"

"He says to me, 'You don't have to believe in God to take Step Three.'"

"First I said, 'Joe, I have no idea what you're talking about.'" Then I pointed to the wall. "Look, it says, 'We made a decision to turn our will and our lives over to the care of God as we understand Him'"

"Joe said, 'Listen kid, in your case if you turn your will and your life over to this chair' (and he points to this chair), he says, 'I guarantee you an instant miracle.'"

Hands over mouths as a bleat of chuckles ripples through the room – a giant being tickled awake.

"I said, 'Okay, Joe, I turn my will and my life over to the care of this chair, now what's the miracle?'"

"Joe says, 'Well, the miracle would be that your life is no longer in the hands of an idiot.'"

The punchline, the lesson, the *reveal* releases a torrent of laughter. People are crying it's so funny.

"And I'm not arguing with him or anything," Bob hollers over the mayhem, "I'm just thinking, yeah, that's about right."

Care can be amusing even when it's deprecating, and Bob's got me hooked.

'The Lesson of Looking Around'

Then there's the one about Don.

"Don Williams had long-term sobriety," Bob says. "And he was a wonderful man. He died several years ago."

"I was at a meeting one time, and the meeting was on Step Ten: 'We continued to take personal inventory and when we were wrong promptly admitted it,' and everybody's sharing their different approaches to Step Ten."

"But Don had a way of cutting through all the bull. He said, 'you know this is all well and good, but I don't really need to do a lot of writing or a lot of other stuff. I simply have to look around me, where I work, out in public, in AA, and with my family. If I look around me and I see a lot of people struggling with the same stuff I'm struggling with, with the insecurities and the fears and the frustrations of life, and I see myself *in them*, you can bet that I'm in good spiritual stead. But if I look around me and I see a lot of idiots that need straightening out you can bet I'm spiritually sick."

This one humbles me to pieces. Some AA members are fantastic storytellers. They cull out of lived experience such sublime and subtle parables. To perceive with empathy and compassion is to perceive mindfully.

Bob says, "I have to have a spiritual solution. My *Being* must become different and I can't do that on my own. My only hope is to get enough of me out of the way so that some Power that's behind the curtain of the universe will come into my life and change the things in me that I cannot change, that no human power can change."

A cigarette cough covers the small silence between Bob's last and next words; a rustling of papers, laminated and otherwise, and the restless sound of bodies shifting in place, trying to find comfort.

"And I know because I've tried. I've tried everything there is to try. And all so I can get up one more day and realize it's not about me."[20]

NOTES

[1] Taken from Books X and XI of Homer's *Odyssey,* Elpenor is the first character in Western literature to die an accidental death due to alcohol consumption. He serves under Odysseus though he is "none too brave in battle, none too sound in mind." At the end of Book X, "sodden with wine he'd bedded down […] But roused by the shouts and tread of marching men […] leapt up with a start at dawn but still so dazed/he forgot to climb back down again by the long ladder—/headfirst from the roof he plunged, his neck snapped/from the backbone, his soul flew to Death" (Book X, lines 608–615). The ghost of Elpenor visits Odysseus at the beginning of Book XI because "he'd not been buried under the wide ways of earth/[…] we'd left his body in Circe's house/unwept, unburied." The spirit requests of Odysseus to "[…] burn me in full armor, all my harness/heap my mound by the churning gray surf—/a man whose luck ran out—/so even men to come will learn my story" (Book XI, lines 58–85). Not exactly the first AA story, perhaps it was a cautionary tale for those ancient Greeks who couldn't hold their *hemeris*.

[2] An AA meeting is a "speech event" contends Klaus Mäkelä and colleagues (1996). There are miracles, or so it is said, but there is no magic.

[3] Addiction feels like 'a lack' in something unnamable and unknowable. In AA, this feeling is termed 'restlessness, irritability, and discontentedness' (Anon, 2001, p. xxviii), descriptors for emotions that, in "The Doctor's Opinion" (pp. xxv–xxxii), will continue to surface unless "the sense of ease and comfort which comes at once by taking a few drinks" is replaced by "psychic change," i.e., a spiritual awakening or conversion. Then, "the very same person who seemed doomed, who had so many problems he despaired of ever solving them, suddenly finds himself easily able to control his desire for alcohol, the only effort necessary being that required to follow a few simple rules" (p. xxix).

[4] My symptoms began at least seven or eight years before Prozac and the hard medicalization of psychotropics. AA's medicalization is soft in comparison. Alcoholism is a disease or an illness in name only as, (a) it is a disease for which one must make amends, and (b) medications to treat it are frowned upon (e.g., Anon, 1957).

[5] Bob's description of intoxication reminds me of Martin Heidegger's (1962) notion of "being-in-the-world," which is an anti-Cartesian subjectless and objectless understanding of human Being as pre-cognitive and pre-theoretical, i.e., the not-knowing (one might say the non self-consciousness) of *being-in,* rather than *observing from* a disembodied mind upon a world that is brought into existence by one's apprehension of it. Again, however, Heidegger is not a good fit for AA as that group requires a return to a core notion of identity and subjectivity from a fragmented ontology of addiction. Heidegger begins with *being-in*; addiction is in many ways a sort of *being-out*–out of the lifeworld of sociality, into a recursive, egoistic loop.

I can recognize my lived experience in Bob's. Not the specifics, but his perspective on intoxication, what Avital Ronell (1992) calls "destructive *jouissance*." (p. 60). I think it would be a breach of AA culture if he'd related these interpretations in 'war-story' fashion, which is a tone, I think, more than anything formal or substantive.

[6] See, for example, Carolyn Knapp's (1996) memoir, *Drinking: A Love Story.*

[7] And my arm was pricked. The drug ran through my veins. I felt the colour come into my cheeks, and instinctively I knew that a feverish sparkle was in my eyes. I had been haggard and my face drawn and bloodless, now a warmth and brilliance came to me, and the pain died, and then came sleep. Now answer me my question. Did my responsibility begin then? (Richard Pryce, *An Evil Spirit,* 1887, 2: 71–72, quoted in Susan Zieger, 2005, p. 127).

To be 'true to life' I would add another question to the preceding internal monologue: *How can I get more?!* Also, unlike Pryce's 'morphinomaniac' heroine, I'm not concerned with responsibility. In 1887 when *An Evil Spirit* was written, the disease concept (e.g., E. M. Jellinek, 1960) was not yet ascendant, and addiction/alcoholism was primarily dealt with in the Christian provinces of sin and salvation. Though the disease concept goes at least as far back as Benjamin Rush's (1819) publication of *An Inquiry into the Effects of Ardent Spirits,* its widespread acceptance can be attributed to the mainstream popularity and acceptance of AA (William White, 1998). Of course, a great stigma was lifted off the shoulders of addicts and alcoholics by this paradigmatic shift.

[8] Such a description of the opiate rush is not quite right. Less external observation more internal elation. Ronell (1992), implicitly commenting on Levinas's (1969) notion of exteriority and one's ethical responsibility to alterity, writes: "Drugs, it turns out, are not so much about seeking an exterior, transcendental dimension—a fourth or fifth dimension—rather, they explore *fractal interiorities*" (p. 15). Drugs generate a "supplementary interiority" (p. 33), which I imagine as a warm cocooning, a totalizing well-being and a slowing down of time. According to Levinas (in Jeffrey Nealon, 2003), intoxication is a refusal of one's ethical responsibility to alterity. If intoxication precludes exteriority then Ronell's (1992) thesis is correct: drugs produce chronically reproducing patterns of interiority, which, for me, are toxic in metaphor and in fact.

[9] Levinas (in Nealon, 2003) argues that addiction prevents the subject from any direct encounter with the *il y a*, or the *there is* of human being, which is akin to Jean-Paul Sartre's (1964) existential 'nausea' and Heidegger's (1962) 'angst': "the Being which we become aware of when the world disappears…" (Nealon, 2003, p. 176). For Levinas's (1969) ethics of alterity, which is similar to Bob D's "primary purpose" ethics, the way out of the *there is* is only through the crucible of the face-to-face encounter with the needful other. "Intoxication is a wallowing in the terrifying materiality of the *il y ya'*s 'impersonal being,' a state where the call or face of the other counts for nothing" (Nealon, 2003, p. 180). To recover in AA it seems, is to transcend the *il y ya* once "subjectivity is torn away from the anonymity of the *there is* by a responding to the other…" (p. 178).

[10] Again, Bill Wilson reminds members of "the common saying that holds well in meetings […] 'Find the similarities and discard the rest'" (Anon, 1973/2013, p. 25), which is an example of AA's thick coherence as a cultural system, and its reliance on intersubjective social processes like recognition and identification. For William Sewell, Jr. (2005), cultural systems, or "semiotic communities" are thinly coherent; that is, while social actors are bound to each other by a shared language, for example, they do not "form a community in any fuller sense" (p. 166). AA is *thickly* coherent because as a

formal institution it relies on shared sets of deeply held values and beliefs. In meetings, however, and in listening to speakers online, I noticed a split between two distinct AA philosophies: a conservative tone that champions the thick pedagogical structures of the Big Book (Anon, 2001) vs. the more exploratory, interpretive ("thinly coherent") line of the 12 & 12 (Anon, 1952).

[11] I wonder why the late writer David Foster Wallace (1996) labeled AA an irony-free zone. Perhaps he meant the terroristic kind you see on TV.

[12] Is Bob alluding to craving, or to the depressive pall—Levinas's *il y a,* the nausea and the angst that consumes you when the substance leaves your system, and you're left with only your facial expressions and your acumen with small talk to counter the world? I will come to realize that Bob abides by the Tenth Tradition (Anon, 1952) in the strict sense, but that he very definitely has opinions on outside issues and he brings them to bear in meetings (however subtly) where he attests to a set of beliefs and values from a deep fund of eclectic knowledge and intuition. Since, for some, sobriety doesn't always feel so wonderful at first, you might have to find other ways of knowing and doing in order to make AA work for you.

[13] William James (1958) described "self-surrender" as synonymous with "conversion," i.e., religious self-transformation that "[…] has been and always must be regarded as the vital turning-point of the religious life…" (p. 172). If self-surrender is also a "spiritual awakening" then it is the "vital turning-point of life" in AA.

[14] A Taoist tale adapted from: http://cals.conlang.org/translation/story-about-the-farmer-whose-horse-ran-away/language/temarp/xroox/ Retrieved August 21, 2014.

[15] Paul Grossman and Nicholas Van Dam (2011) cannot find consensus among Western and Buddhist scholars nor between natural and social scientists "both separately and communally" for such an ancient and elusive notion as "mindfulness." Darcel Reyes (2012), however, sees in mindfulness "a balanced frame of mind that avoids over-identification with the state of suffering or pleasure [which] allows detachment from negative emotional states and the realization of the impermanence of all emotions" (p. 83). Richard Davidson and Sharon Begley's (2012) work on emotional styles brings mindfulness to life with descriptors like resilience, curiosity, right speech, attentiveness, and concentration, to one who is practicing mindfulness in the lifeworld. And Jon Kabat-Zinn (2003) defines mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment" (p. 45). According to my count, several of the Twelve Steps could potentially involve certain aspects of mindfulness. In fact, some of the Steps are prescriptions for a meta-awareness of powerlessness, moral defection/restitution, and ethical action. But Bob turns any potential deficit perspective on its head. For example, instead of 'defects of character,' (Step Six), which was described to me by a long-time member as paralleling the Seven Deadly Sins, Bob says 'defense mechanisms,' which, besides bringing the term up to psychoanalytic date, implies a sense of 'normative' (i.e., medicalized and scientistic) mental processes in place of the Christian ethics of the Seven Deadly Sins.

[16] One hears a whole lot about how Bill and Bob intended it (e.g., Kurtz, 1975). Conservative hermeneutists with no ill will whatever. Still there is sadness, if not anger, in several of the voices I've heard bemoaning what AA has become in certain quarters: psychoanalysis, group therapy, etc.

[17] There is an abundance of research on spirituality in AA (e.g., Alyssa Forcehimes, 2004; Marc Galanter, 2007), but little of it addresses mindfulness or mindfulness-based practices specifically. Kabat-Zinn (2003), perhaps echoing Norman Denzin's (1987) description of addiction/alcoholism as a "dis-ease" with self, time, others and the world, argues that mindfulness is a medicine for the 'dis-ease of the three poisons': greed, hatred, and unawareness (in Jane Warren, 2012). Warren herself describes mindfulness viz. recovery from addiction as "an invitation to be where one already is and to know the inner and outer landscape of the direct experience in each moment" (p. 14). Citing John Tarrant (2004), and melding Buddhist and Heideggerean metaphoric forms of enlightened consciousness, she likens the understanding mind of acceptance "to being let out to a large and open meadow where there are no walls, no structural protections, only light, space, and openness, which provide no answers" (Warren, 2012, p. 15).

[18] Just as Bob's story veers in and out of danger and certitude, his sober (AA) identity wavering in and out of focus, Bill Wilson's story is far more complex than his inspirational Big Book (Anon, 2001)

memoir would have us believe. He was five years sober and had just helped to publish the Big Book, in fact, when "the joyous energy he had come to think of as his birthright reclaimed had begun to wane" (Francis Hartigan, 2000, p. 2). His restless search for relief from his crippling depressions through experimentation with other modes of treatment and experience would lead to denouncement from some in AA (Hartigan, 2000). In many ways Bill Wilson is not his story—at least not the one presented in the Big Book (pp. 1–16), the penultimate lines of which read: "Most of us feel we need look no further for Utopia. We have it with us right here and now." Bill's story continued and changed for a long time after the Big Book was published, but he never took another drink.

[19] For Bob, judgment, will, and self are one and the same phenomenon with one and the same purpose or function: the core of a precarious notion of who and what one is; a notion, and a function/relation of oneself to oneself that seeks only to destroy oneself in the literal sense. In AA it's a time-honored axiom that addicts and alcoholics want themselves dead.

Unfortunately, Bob does not trace the route he took to get to a place of non-judgment. I assume it's the Tenth Tradition and he's keeping his opinions on outside issues to himself. Still, he admitted to identification with all the world's religions and he told a Taoist story for God's sake. And meditation is in the 11th Step! And no prescription for it as there is for prayer, just an open invitation (see Kevin Griffin (2004): *One Breath at a Time*). Again, I'm reminded of Levinas (1969) transcending the *il y ya* for the other, which is no mere suggestion. Words like duty, responsibility, and obligation lend metaphysical weight to Levinas's texts (and to Bob's utterances). Levinas's ethics of alterity is a refutation not only of Nietzsche's ethics, obviously, but also of Kant's deontology, which focuses on motive, and J.S. Mills's consequentialist utilitarianism. Levinas had little use ethically for Heidegger's subjectless *Dasein.* Levinas's ethics, like AA's, requires a return to the subject and to subjectivity for without the subject there is no other.

[20] Perhaps there is a sub-strait of compassion in the lifeworld that is pre-ontological, as Levinas (1969) argues. Ethics as base, as first philosophy, prior even to Being: "The metaphysician and the other do not constitute a simple correlation, which would be reversible […] they would complete one another in a system visible from the outside" (Levinas, 1969, p. 35).

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MALGORZATA POWIETRZYNSKA

13. FROM THE GRIP OF DEPRESSION TO A NEWFOUND EUPHORIA FOR LIVING

Gliding across the Spectra of Resilience and Outlook

ABSTRACT

I situate this chapter in a familial experience involving my ex-husband (Piotr). I tell an impressionistic tale of how two of my identities came together and how what I learned through mindfulness research informed our (Piotr's and my) efforts towards improvement of Piotr's emotional wellbeing. Since it touched me on a very deep level, the story has become the most compelling evidence of how mindfulness practices can mediate wellness. In this powerful first-hand experience, Piotr and I appear to be successful in putting to the test Davidson's theory that mental exercise may assist in altering our emotional styles. It also afforded Piotr and me learning about our selves. Central to this story is the meaning of compassion and its enactment. I conclude the chapter by advocating the need for conducting research by educators as a means to reflecting on and mediating their practice.

Keywords: mindfulness, emotional styles, wellness, sociocultural research, authentic research

THE SHOCKING MEANING BEHIND 'HE FINALLY DID IT!'

It is a cold evening in early October of 2012. After a relaxing and satisfying dinner at our favorite restaurant, my dining companion and I are on our way back home. I am looking forward to getting there in a matter of minutes and to spending some time lounging on the sofa in front of the TV before turning in to conclude my busy weekday. At the moment, I am unaware that this evening will mark the beginning of a profoundly significant chapter of my life – a chapter that will create openings to enacting and embodying theories and practices I learned through mindfulness-grounded research. My blissful-like state gets interrupted when my cell phone rings. I hear a friend of mine speaking in Polish in a grave tone, "It's about Piotr; he finally did it; he tried to commit a suicide. He's unconscious. The ambulance just took him to Bellevue Hospital. My wife and I are on the way there." As I hear these words, a wave of emotions floods over my mind and body. The familiar knot in the stomach associated with fear and anxiety settles in instantly. I can sense adrenaline

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rushing through and my heart pounding in the chest. Simultaneously, my brain is busy cognitively processing information and coming up with the plan of action. Guided by the resultant thoughts mixed with emotions I call my now adult son, Alex, and break to him the disturbing news about his father. Moments later Alex and I arrive at the hospital's ER where we are relieved to learn that Piotr will make it. We stay through the night witnessing three consecutive shifts of ER staffers attending to Piotr in an unhurried manner with long periods of in-between non-actions. Fourteen hours later we are informed that Piotr will be transported to the psychiatric ward where he will need to stay for observation and further evaluation.

WHAT TO DO? WHO'S TO 'BLAME'?

It takes extreme situations like those involving attempts at self-inflicted (or other-directed) harm for some of us to reflect (even if briefly) on the *why* questions. When it happens, mass media that thrive on sensationalizing individual and collective tragedies will parade reactions by members of the victim's community who reside in his/her varied social fields (be it family, friends, neighbors, co-workers or co-worshipers, to name a few). Invariably, these commentaries will fall somewhere on the spectrum between an utmost surprise (e.g., *"He was such a quiet [meaning: pleasant and 'normal'] person."*) and an acknowledgement of "troubling signs" (e.g., *"He has always been an outcast."*) Informed by theoretical frameworks and empirical applications associated with mindfulness-based research, I find both scenarios troubling. In my view, the "surprisees" are possibly people who exhibit low levels of Davidsonian *Social Intuition Dimension* of Emotional Style (Davidson & Begley, 2012). The "knowers," while seemingly well positioned to intervene, appear to lack compassion or perhaps opt not to exercise their agency in mediating the relevant structures. As for the "victims" themselves, if we were to peer into their brain activity, we would likely find that they exhibit physiological markers associated with low levels of *Resilience* and *Outlook*. As I demonstrate below, such was the case with Piotr. Additionally, members of the collective within his closest circle (including me) could not claim ignorance of his gradually deteriorating state of mind.

Piotr and I had been married for 20 years but decided to go our separate ways 10 years prior to the events described in the opening vignette. After the split, even though we did not reside together, we maintained regular contact and managed not to harbor negative feelings toward each other. Indeed, we agreed that as a "non-couple" we were better positioned to (and we actually did) genuinely care for and support one another in our separate lives. I cannot quite pinpoint the time when (following our separation) Piotr started to openly speak about being unhappy, about not having the desire or motivation to wake up in the mornings, and about "being in a very dark place."

Thus, I was aware (as were people around him) of Piotr's deepening depression that was to a large extent catalyzed by his unrealized dream of "making it" as

Figure 1. In a very dark place. Photo by Piotr Powietrzyński

an artist. We (the people in his circle) were also aware that Piotr resorted to unregimented self-medicating practices involving a variety of pharmaceutical anti-depressants prescribed by his primary physician. Piotr made it known that the pills had a very fleeting calming effect and were not particularly helpful in offsetting his undesirable mental | emotional states. Furthermore, it was hardly a secret that Piotr (often in the company of some of his male friends) regularly engaged in consuming excessive amounts of hard liquor in a potentially lethal combination with the prescription pills. Some of Piotr's frustration was compounded by his deteriorating physical health. In our frequent conversations, I tried to make him realize that the body and mind (his physical and mental health) were strongly interrelated. I attributed his emerging afflictions to years of working a night shift that left him sleep-deprived. It was clear that Piotr's worsening physical health catalyzed the decline in his mental wellbeing, which in turn affected negatively his physical condition. As Piotr was experiencing this downward spiral, neither he nor those who knew him seemed able to come to the rescue. Thus, while devastating, his ultimate act of desperation was hardly a surprise to those close to him.

After his release from the hospital, Piotr and I agreed that he would need to make major modifications in how he enacted his life (an ontological transformation) along with a necessary restructuring of his value system (an axiological shift). Therefore, we began conversing about mindfulness and its wellness-mediating advantages as supported by recent neuroscientific findings. At first skeptical, Piotr developed

a curiosity towards the topic as he read about Davidson's research (Davidson & Begley, 2012) and reluctantly agreed to co-participate with me in a five-week long beginners' meditation course at New York's Shambhala Meditation Center. In addition to providing the introduction to a meditation practice, our trips to and from the Shambhala Center afforded Piotr and me "together" time. With passing days, weeks, and months, I witnessed Piotr adopting the meditation practice into his daily routine. Piotr's trajectory towards improved wellness may be viewed as well-aligned with two of his identities: one based in his scientific background as a trained (yet non-practicing) engineer and the other guided by his deep commitment to artistic sensibilities as a creative photographer. As such, Piotr's mindfulness journey may be likened to that of Jon Kabat-Zinn's form, in which the pursuit of contemplative practice is a unifying factor for different ways of knowing (artistic and scientific).

Since the infamous day, Piotr has undergone a profound transformation as his outlook on life improved gradually. He has *re*-turned to his upbeat self who welcomes each day with renewed energy and optimism. He has also resumed his artistic work with reinvigorated creative passion. What may come as a surprise to some, he accomplished this "*re*-birth" without relying on conventional ("mainstream") means: soon after being released from the hospital, he ceased resorting to pharmaceutical "mood boosters" and did not subject himself to the doctor-recommended psychotherapy. Piotr and I consider his disciplined daily engagement in breathing meditation practice a major intervention that has mediated improvements in his mental wellness. In other words, breathing meditation has become Piotr's medication, his proverbial "apple a day," which he administers to himself regularly because he understands he needs it and because he knows it helps. When considering a mindfulness characteristic, "When I'm emotional, I notice how my breathing changes," Piotr commented:

> Dzięki medytacjom, w momencie kiedy zaczynam być zdenerwowany, staram się myśleć o oddychaniu i kontrolować przez oddychanie swoje emocje co udaje mi się coraz częściej. Bingo!
>
> Thanks to my meditation practice, when I begin getting upset, I try to think about breathing and through breathing to control my emotions, which I am able to do more and more often. Bingo!

Hence, according to a Davidsonian framework, Piotr has traveled a considerable distance toward the positive end of the outlook dimension of his emotional style. Physiologically speaking, Piotr was possibly successful in increasing "the activity in the nucleus accumbens – activity sustained by signals from the pre-frontal cortex – which underlies the ability to sustain positive emotions" (Davidson & Begley, 2012, p. 85). Also, Piotr appears to have strengthened his resilience in coping with adversity; while at times he will still temporarily brood over occasional failures, they no longer send him to a "dark place" as his ability to help himself to "get unstuck" has strengthened. Even though I can attest to Piotr's progress, he maintains

that he has not quite reached where he would like to be in regard to coping with what he perceives as occasional hardships (such as a monthly statement reporting low royalties from sales of his images). When we discussed a mindfulness characteristic, "I quickly recover when things go wrong for me," Piotr rated himself as still being at a slow-to-recover end of the spectrum. At the same time, he quickly added that he wished to move in "the other direction," i.e., he wanted "to be able to bounce back quicker" and to "decrease the [emotional] inertia." In neuroscientific terms, a decreased level of resilience is associated with low activity in the prefrontal cortex or a paucity of connections between the left prefrontal cortex and the amygdala. To cultivate greater resilience and faster recovery from setbacks, Davidson recommends mindfulness meditation as "it strengthens [those] connections between the prefrontal cortex and the amygdala, promoting an equanimity that will help keep one from spiraling down" (p. 243). Therefore, it is safe to assume that if Piotr sustains his "romance" with meditation, he will continue developing new neural pathways and will eventually reach desirable (as defined by him) levels of resilience.

Even though my involvement in the aftermath of Piotr's ordeal would not be considered formal research, in my eyes he became a beneficiary of the knowledge I had acquired through my engagement in social inquiry into mindfulness. The uplifting quality of this very personal experience furthered my commitment to conducting authentic research. In the context of the porous character of the boundaries among social fields, participation in Piotr's triumphant journey provided powerful and compelling evidence supporting the desirability of promoting mindfulness-based interventions through research and practice.

Figure 2. Piotr in a happy place

THE BRAHM'S CONCERTO THAT NEVER WAS – THE EMERGENT NATURE OF SOCIAL INQUIRY

Piotr's engagement with breathing meditation practice became an impetus for conducting a research study on social resonance. It was about the time when Tobin intensified his theorizing of social resonance following his emotional, teary-eyed, early-morning-milk-fetching encounter with Johannes Brahms' violin concerto (Tobin, 2013). Curious about this historically constituted emotional reaction, Tobin initiated a self-study aiming at investigating the intensity and possible fluctuations in his heart rate, oxygenation level in his blood and facial expressions while watching the concerto performance of a Japanese-born soloist Sayaka Shoji. Coincidently at the time, Tobin acquired a bio-harness and was testing its utility for conducting research on physiological manifestations of emotions enacted in teaching | learning science. To that end, he analyzed the readings captured by the bio-harness during his engagement in a meditative practice. Highly intrigued by what he was learning, Tobin encouraged a few of his colleagues (including Chris Siry, Helen Kwah, Gene Fellner and me) to replicate his two self-investigations. While at the time my meditation was not very consistent, I knew that Piotr has been keeping up with his for about six months. In addition, since I knew Piotr to be a classical music lover, I theorized that the concerto would generate waves of emotions in him. Therefore, instead of doing a self-study, I recruited Piotr's participation with relative ease, as by then he was an avid supporter of my doctoral journey.

On the day of "the study," I, now a fairly knowledgeable and experienced researcher, confidently set up a flip camera and established a Bluetooth connection between a PC laptop and a finger pulse oximeter whose two components I had placed on Piotr's wrist and index finger respectively (for more extensive description of the use of oximeters refer to Olga Calderón's 2014 dissertation). Piotr and I sat on a moss green, plush-like sofa in the living room of his rented apartment in Queens. In this "phase one" of the study, the loosely-defined plan was to establish whether a 10-minute breathing meditation practice was associated with particular physiological patterns (as expressed in the level of Piotr's heart rate (HRD) and oxygenation in his blood (SpO2) that would be distinct from the state of equilibrium (or the base line). Most of the studies investigating what happens during contemplative states focus on brain activity. For example, in research involving Buddhist monks, Richard Davidson uses functional magnetic resonance imaging (fMRI) in order to peer into what happens during different types of meditation practices as well as to ascertain how brains of experienced meditators differ from those of novices or non-meditators. An older and less advanced method employed to gain similar insights is the use of electroencephalography (EEG), which measures basic brain electrical activity. EEG may be used to give mindfulness trainees information concerning the brain waves they produce as illustrated in the Concord High School study (Finley & Barton, 2013). In an investigation that examined reflexive practices involved with learning to teach, Tobin utilized EEG to examine

his neural processing as he observed his teaching of a doctoral level class (Tobin & Ritchie, 2012). In reporting the study results, Tobin and Richie point out that "the equipment available for neural level research does not allow for extensive movement, including movement of muscles surrounding the mouth while talking, movement of the head, gestures, and body movements in general" (p. 126). In that sense, notwithstanding high cost of the neuroscientific equipment, while it is an undeniably powerful source of valuable information, its utitlity in a classroom situation is highly impractical. Thus, in our studies centered on emotions, we favor investigations involving HRD and SpO2 readings and analyses of facial expressions.

Since during breathing meditation a person focuses on his/her breath, the breathing pattern is expected to change; I find that my breath slows down and it is deeper than usual. I theorized that in a meditative state Piotr's HRD would be lower and his SpO2 would be higher as compared to the respective readings in a non-meditative state. My theorizing was supported by empirical evidence that emerged from one of our studies where participants' HRD appeared to have been mediated (dialed-down) by deep abdominal breathing (Alexakos, 2015). In order to obtain a base line for his SpO2 and HRD during a non-meditative state Piotr and I engaged in a 35-minute dialogue (in our native tongue) around the characteristics in one of the versions of the mindfulness heuristic. We followed a protocol similar to that employed in the aforementioned study where individual characteristics in the heuristic are used to guide conversation. Piotr engaged in his meditation practice immediately after we completed our discussion. What was to follow, on another day, was the "second phase" of the study involving Piotr watching the Brahm's concerto.

"Can It Be That My Body Does Not Need All That Oxygen?"

In order to analyze the oximeter data readings, I loaded up the file into SPSS and ran basic descriptive statistics (see Tables 1 and 2). Upon eyeballing the results, I discovered that Piotr's HRD was indeed slightly lower and had less variability in a meditative state as compared to a non-meditative state or what I naively considered the state of equilibrium. What drew my attention, however, were Piotr's SpO2 readings, as they appeared low compared to what is regarded a healthy level (95%–100%). To investigate this finding further, I proceeded to running frequencies (see Tables 3 and 4).

In the non-meditative state, 62% of the time Piotr's SpO2 was at 95%. Interestingly, however, during the meditative state, 87% of the time, his SpO2 was below the 95% mark with the majority of the time (59%) recording a relatively low reading of 93%. Alarmed by the oxygenation data, I shared with Piotr my findings and my concern for his wellbeing.

In his immediate reaction Piotr wondered if his body simply did not need "as much" oxygen. When I expressed doubts, he brought up as a possible culprit his 30-plus history of intense cigarette smoking. Indeed, some research establishes a

Table 1. Piotr's SpO2D and HRD (Non-meditative state)

		SpO2D	*HRD*
N	Valid	6582	6582
	Missing	0	0
Mean		95.3	64.1
Median		95	64
Mode		95	63
Std. Deviation		.6	2.8
Minimum		94	59
Maximum		97	88

Table 2. Piotr's SpO2D and HRD (Meditative state)

		SpO2D	*HRD*
N	Valid	1839	1839
	Missing	0	0
Mean		93.6	63.3
Median		93	63
Mode		93	63
Std. Deviation		.8	2.5
Minimum		93	58
Maximum		97	74

Table 3. Piotr's SpO2D (Non-meditative state)

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	94	373	5.7	5.7	5.7
	95	4102	62.3	62.3	68.0
	96	2083	31.6	31.6	99.6
	97	24	.4	.4	100.0
	Total	6582	100.0	100.0	

connection between smoking and lowered oxygenation in blood. For example, in a 2002 study of 38 healthy volunteers, cigarette smoking was associated with a decrease in nocturnal oxygen saturation (Casasola, Alvarez-Sala, Marques, Sanchez-Alarcos, Tashkin, & Espinos, 2002). Becoming aware of a potentially unhealthy condition gave Piotr pause and yet another reason to consider quitting the habit.

Table 4. Piotr's SpO2D (Meditative state)

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	93	1086	59.1	59.1	59.1
	94	521	28.3	28.3	87.4
	95	164	8.9	8.9	96.3
	96	45	2.4	2.4	98.7
	97	23	1.3	1.3	100.0
	Total	1839	100.0	100.0	

THE UNEXPECTED WITHIN SOCIAL LIFE – THE (INDISPUTABLY) EMERGENT NATURE OF SOCIAL RESEARCH

> If you read original scientific papers, it is easy to get the impression that the researchers thought of a question, designed a clever experiment to answer it, and carried out the study with nary a dead end or setback between them and the answer. (Davidson & Begley, 2012, p. xv)

In the above quote, Davidson remarks on the serendipity implicit in conducting research that is often invisible to those who receive the study's final product. While some scholars claim that they are able to exert full control over their work (by carefully designing a study and then testing the predetermined hypotheses and answering the pre-fixed research questions), I find it valuable for researchers to explicitly acknowledge that the "messiness" and unpredictability of social life must necessarily play a major role in their practice. Assuming a theoretical framework in which research (including its design) is expected to be contingent and emergent creates spaces for exciting and unanticipated explorations that enter and expand our field of vision as we dive into our work. A key component of this principle rests in the researcher's willingness (ability) to step down from the "expert" pedestal and invite the study participants to partner with her in a democratic dance of give and take. Thus, she needs to feel at ease with shifts, twists, and turns accompanying the storyline as the study unfolds. This openness and flexibility are requisite for research to be authentic, i.e., if research participants are to benefit from it, they must have a say in how the research evolves. I still experience the challenge of not privileging a single voice (particularly my own) and to understand and accept other people's standpoints. A considerable amount of time during our research squad meetings was (and continues to be) devoted to discussing the importance of valuing and learning from difference. The emergence of our recent heuristics: *Mindfully Speaking* and *Mindfully Listening* was mediated by similar conversations often in response to our research findings. As I illustrate below, while valuing difference ranks high in my axiology, I am still working towards incorporating it into my in-the-moment enactments. Unsurprisingly, positioning myself within another's

vantage point becomes a particularly formidable task when strong emotions are involved, i.e., when I (and those I happen to interact with) feel passionately about a given concept. Fortunately, for those of us who wish to transform our practice, there are tools that may help with this challenge. I find video recording an invaluable resource in assisting with reflecting back on a practice and bringing into a conscious level much of what may be invisible to us in real time. Frequently, it is not until we analyze data captured by a camcorder, when we zoom in to a micro-level, that hidden treasures of social life reveal themselves. As I have seen in our research, a reflexivity booster feature of video files (and other electronic media such as oximeters) may become a useful tool assisting in building mindfulness which rests in increased awareness of social structures relating to self and others. I consider it of utmost importance that video recordings be used by pre-service and in-services educators towards improvement of their classroom practice or any other practice involving interactions with other sentient beings. Ergo, we routinely record, analyze, and share with participants all aspects of our interpretive research. Recordings of class sessions may also be made available to students as a way to assist in recollecting the conceptual content of the class and, perhaps more importantly, in examining practices and enactments that emerge during the class. We are in the company of our New York University colleagues, Susan Kirch and Kara Naidoo, who utilize video of "shared authentic teaching experiences" as a training tool towards honing "transformative reflection" skills in pre-service science education teachers (Naidoo, 2014).

"Oh-Oh! Do I See What I Think I See?"

> At peak moments [of entrainment] the pattern tends to be jointly shared among all participants: in high solidarity moments, bodies touch, eyes are aligned in the same direction, movements are rhythmically synchronized. At moments of failure of the interaction, bodies turn away from each other, heads turn downward or inward toward one's body, eyes look down or away. (Collins, 2004, p. 135)

Figure 3. Emotional entrainment

Figure 4. Failure of the interaction

Following my visit to Piotr's apartment, I proceeded to *re*-viewing the video file of our heuristic discussion. My initial interest was in the discursive content of our conversation, i.e., I wanted to remember and transcribe what each of us had said. A few minutes into the file, however, my attention was drawn to our physical conduct. I started noticing evident synchronies in the way Piotr and I positioned and moved our bodies, in how we gesticulated, in our facial expressions, and in our eye movements. To further investigate what I was seeing, I shifted the level of analysis by watching the recording first in slow motion and then frame-by-frame. There was no denying it; what was captured in images moving in front of my eyes was an instance of what at the time I understood to be a manifestation of social resonance. In this instance, Emotional Energy (EE) (Collins, 2004) constituted a structure that generated high levels of physical entrainment unbeknownst to us in the moment. The outtakes from the video file in Figure 5 capture some of our bodily synchronies.

When arguing the empirical nature of EE, Collins points to bodily postures and movements, eyes, voice, hormone level, and facial expression as possible ways of identifying its existence. Knowing that the occurrence of social resonance is historically constituted, I thought about the significance of Piotr and I having spent 20 years living together. At the experiential level we know that by being in with the other, we may become like the other. We possibly develop similar patterns of conduct and we are able to understand each other "without words." I find that our perception of social world is limited by our senses and by lack of attention to the in-the-moment enactments prevalent in Western cultures. It is quite possible that through mindfulness practices, we may develop increased awareness of what otherwise happens at a subconscious level. It was enlightening to learn that other forms of perception exist. For example, Zoran Jasipovic (2014) shared his findings around the practice of non-dual awareness meditation that is characterized "by a progressive decrease in habitual fragmenting of the field of experience into self-related versus other-related processes" (p. 13).

Figure 5. Synchronic body movements

"I Want to Make Happy Someone Who Truly Needs Help." Can Compassion Be Selective?

Our synchronic dance took an abrupt turn 29 minutes and 50 seconds into our conversation. While considering a mindfulness characteristic: "I'm compassionate to people even if I don't know them," Piotr and I encountered a disagreement that generated an emotionally charged exchange lasting about 3 minutes and 15 seconds. To counter Piotr's self-rating of *often*, I brought up a situation that occurred on a cold March evening during one of our trips back from a mediation class. On that occasion, we were approached by a homeless person who politely asked for money. I engaged the young man in a brief conversation and handed him $5. After we had walked away, Piotr, who believed that the person appeared able-bodied and possibly a "scammer," expressed his disapproval of my action. Now, evoking the situation, I questioned Piotr's assessment of his level of compassion towards others. The following is a one-minute-nineteen-second excerpt of our conversation represented by text (both in Polish and in its italicized English translation) and by the select outtakes from the video file:

Małgorzata: Nie masz dla wszystkich, bo …

You don't have it [compassion] for everyone because …

Piotr: Nie mam, nie mam …

No, I don't, I don't have it …

Małgorzata: Bo ty wybierasz kto zasługuje na *compassion* a kto nie zasługuje. A *compassion*, według mnie jest, powinna być, niezależna od tego co dany człowiek sobą reprezentuje …

Because you choose who deserves your compassion and who doesn't. And compassion, I believe, is … should be, independent of what a particular person represents …

Piotr: Idealistycznie rozmawiając tak, a praktycznie, umm …

Idealistically speaking, yes, but in practice, umm ...

Małgorzata: … dlatego, że to nie jest twój problem co się z tymi pieniędzmi stanie. Czy ten człowiek był uczciwy, czy ten człowiek był nieuczciwy, czy on wyda na jedzenie, czy wyda na crack …

... because it is not your problem what will happen to the money. Whether the person was honest, whether he was dishonest, whether he spends the money on food or on crack ...

Piotr: Aaa …

Aaa ...

Małgorzata: … bo to nie jest twój problem, to jest jego problem, to jest jego problem, że on jest nieuczciwy. Twój problem jest taki, że …

Because it is not your problem, it's his problem; it is his problem that he is dishonest. Your problem is that ...

Piotr: Mój problem jest taki, że jeśli mam 5 dolarów, które mam wydać to chcę je wydać, chce kogoś naprawdę uszczęśliwić kto tej pomocy potrzebuje.

My problem is that if I have $5 that I want to spend, I want to spend it ... I want to make happy someone who truly needs such help.

Małgorzata: Ale skąd wiesz … Ale kim ty jesteś żeby decydować kto tej pomocy naprawdę potrzebuje?

And how do you know? But who are you to decide who truly needs that help?

Piotr: Żyjemy w świecie …

We are living in a world …

Małgorzata: Ale ty nie znasz tego faceta, nie masz zielonego pojęcia kim jest ten człowiek; czy on potrzebuje, czy nie potrzebuje, czy jest chory, czy jest głodny, czy jest cwaniakiem, czy jest pijakiem, nie wiedziałeś tego …

But you don't know this fellow, you have no idea who he is; whether he is needy or not needy, whether he is sick or hungry, whether he is a scammer or a drunk, you did not know that …

Piotr: Aaa …

Aaa …

Małgorzata: Ty zrobiłeś założenie.

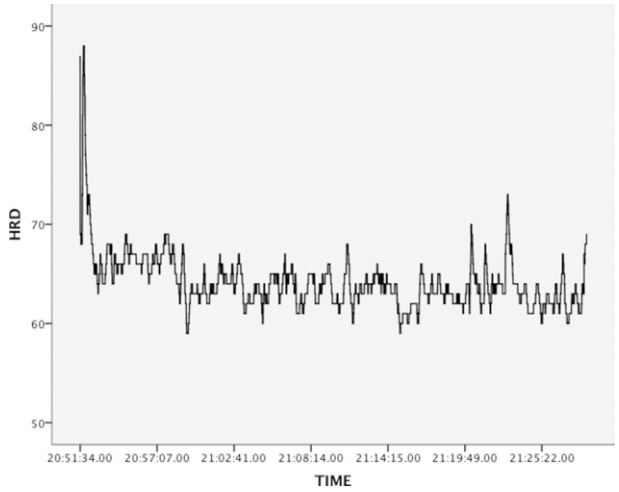
You made an assumption.

Watching the video I noticed how Piotr's and my conduct reflected our elevated, negatively valanced emotional state even though when "caught in the moment" we might have been oblivious to it. For example, unaware of it at the time, I crossed my arms 49 seconds into the exchange as if closing myself off.

As may be evident in the transcript of our conversation (notwithstanding its imperfect and incomplete representation of what transpired (see Fellner, 2014)), I kept on interrupting Piotr and challenging his point of view while trying to convince him of my position by speaking over him. In other words, I was failing miserably at engaging in *radical (mindful) listening*. Even without conducting a formal prosody analysis, the increased volume, pitch, and frequency of our voices (particularly mine) were evident at the meso level. Piotr's bodily response occurred 18 seconds after I folded my arms when he visibly shifted his body and crossed one of his legs over the other seemingly mimicking my crossed arms.

Interestingly, for a few seconds Piotr's leg and one of my then-very-animated arms were moving in unison. When we watched this fragment of the video file together, Piotr admitted to "boiling" inside. Indeed, his emotional response did register as a change in his heart rate (as represented in Graph 1 by a steep peak that occurred between 21:19:49 and 21:25:22). However, "on the outside" Piotr was much more successful than I was in waiting his turn and in controlling his emotions. In other words, while I was *reacting* (a feature of an unmediated emotional state), he was *responding* (a quality of a mindful state). Ironically, throughout our conversation I felt that having devoted a considerable amount of time to conducting mindfulness-based research, I knew more on the subject than did Piotr. Therefore, I was convinced that I had something I could educate him about. In that sense I assumed a familiar role of a "teacher," or a person with "knowledge," which represented a fairly traditional epistemological stance. It turned out that it was Piotr who embodied mindfulness principles to a much greater degree than I did. In retrospect, I realized (yet again) that the value of knowledge lies not in what you know cognitively but in how well you are able to enact or apply it. Furthermore, I was reminded of dialectical relationships (in this case between teaching | learning) inherent in social life. One must never forget that teaching and learning are reciprocal activities. Therefore, it is limiting and artificial to ascribe static roles and identities (such as that of a student and a teacher) to actors in an educational field.

Piotr and I noticed that despite the argument getting "heated," we did not allow for negative emotions to totally take over and we were able to move on by "agreeing to disagree." Such a scenario would not have been possible when we were younger and perhaps less mindful. We remembered situations during our marriage when discussion like this one ended with feelings getting hurt and doors being slammed (both literally and figuratively) followed by long periods of mutual silent treatment. I wished I had known then what I know now about mindful ways to prevent emotionally charged reactions from arising or to deflect potentially explosive situations. There is plenty of evidence that outside of our homes and living rooms students and teachers need assistance with mediating emotional climates in schools for the benefit of learning and wellness. Similarly, our workplaces are sites where a good dose of mindfulness could potentially assist with calming rough emotional



Graph 1. Peaks and valleys of Piotr's HRD during the heuristic discussion

waters. Sometimes as little as a softened facial expression or a gentler tone of voice might do the trick as was the case with Piotr and I concluding our argument.

HOW MAY IT BE RELEVANT TO YOU?

If we were to follow Margaret Eisenhart's (2009) logic regarding theoretical generalizability of "qualitative research," we should leave it up to the reader to decide how relevant to their context is what I have discussed in this manuscript. However, propelled by my passion and sensibility as a veteran educator and now a curious hermeneutic researcher, it behooves me to share my understandings of possible implications my work may have for teaching and learning. First, I need to underscore that having been exposed to and having plunged into the waters of sociocultural framework I have began to frame education broadly as extending

beyond (or rather including) the walls of a formal classroom. Indeed, I can think of very few aspects of social life that would not present an opportunity for learning to occur. The roots of my conceptualizing education in this way lie in the gradual shifts in my epistemological and axiological stance away from the (non-egalitarian) mainstream that privileges the dominant (as determined by a socio-economic affiliation) ways of being, (inter)acting, and knowing. Applying sociocultural lenses to research is meant to widen, sharpen, and nuance our understandings of the lifeworlds of those we study, including ourselves. The lenses serve to legitimize diverse ways of knowing and they acknowledge the multiplicity of the pathways we travel to arrive at that knowledge. Such comprehensive understanding of learning is not unique. Others who work in the sociocultural tradition including Maria Varelas, Danny Martin, and Justine Kane (2012), consider "learning as a sociocultural activity that encompasses interactions among people, artifacts, and ideas in sociohistorical, cultural spaces that people shape, and are shaped by, as they act and interact within these spaces" (p. 324).

Schools are a special instance of sites where acting and interacting is expected to lead to knowledge (*re*)production. With their narrowly defined, legislatively-dictated mandates many public schools in US (particularly those serving minority populations in urban neighborhoods) become dysfunctional, unsafe, and hostile spaces where difference (in all its shapes and colors) creates friction and clashes between students and teachers, among students, and among representatives of school personnel. Accordingly, too many members of school communities experience well-documented high levels of stress, depression, and burnout that may originate and be amplified within the school walls and outside of them. In other words, similar to Piotr, many of the actors in educational spaces may find themselves in a "very dark place." If the same actors are to be able to "shape spaces," they may need interventions that lead to the transformation of existing structures including their health. Health might be one of the most important aspects of human experience. In the absence of good health, it is challenging to accomplish the smallest of tasks and to fully enjoy life (as was the case with Piotr). Undeniably, physical and mental wellbeing is crucial for quality educational experience and it is time we focused on wellness as part and parcel of the teaching | learning process. Conventional (Western) medicine (supported by the deep pockets of the almighty pharmaceutical corporations) would have us believe that our health is the exclusive purview of trained doctors and that we have little control over our wellbeing. What I have documented in the pages of this chapter is that it is possible to take charge of one's wellness. I consider Piotr's transformation profoundly compelling empirical evidence of the health mediating effects of mindfulness practices. My participation in Piotr's journey afforded me becoming an eyewitness to how through mental exercise a person may be able to rewire his/her brain and shift dimensions of his/her emotional style towards a more desirable direction. I am convinced that if we used fMRI to obtain images of Piotr's brain "pre and post-intervention," we would likely register positive changes similar to those recorded in meditation practitioners (including

relative novices) by contemplative neuroscience researchers such as Richard Davidson. Hence, it would follow that it might prove beneficial to incorporate exploration and adoption of mindfulness-based interventions into educational curricula including those in schools of education and in teacher professional development trainings. That there is scientific evidence supporting the benefits associated with mindfulness practices is additional reason to legitimize inclusion of this knowledge base in schools as part of the toolkit shared by teachers, students and school administrators. It is not without significance that Piotr was able to undergo his transformation because he was supported and encouraged by someone who genuinely cared for him. Since mindfulness is proven to assist with strengthening our sense of compassion towards self and others, cultivating it may contribute to creating more caring and supportive school environments similar to those Piotr and I share.

I am not trying to argue that mindfulness is a remedy that can cure all ills of today's educational system; I am painfully aware of the powerful, change-resistant, inertia-laden macrostructures (including economics and politics) that mediate what can and cannot happen in schools. However, I do believe that we have the ability to exert a great deal of agency over our daily enactments regardless of which fields of social life we find ourselves in. Mindfulness-amplified awareness and compassion may allow those enactments to be more responsive, sensitive, and altruistic rather than reactive, hostile, and self-serving.

To be sure, careful consideration needs to be given when selecting an approach to rolling out contemplative practices in schools. While a number of models have already been implemented successfully in a variety of educational settings across the country, they tend to be local in nature and they are typically originated and conducted by well-intentioned, highly motivated mindfulness enthusiasts. Therefore, promoting introduction of mindfulness on a larger scale as a mandated part of curricula might be unrealistic on one hand and counterproductive on the other. Indeed, what amounts to an attempt at legislating a form of mindfulness training into schools is the Academic, Social, and Emotional Learning Act of 2013. Introduced by a vehement mindfulness advocate, Congressman Tim Ryan, the legislation has a predicted 1% chance of being enacted. What complicates matters is that, if mandated, "teaching" mindfulness may be perceived by teachers and students alike as yet another task that needs to be completed within their already busy schedules. The unintended result may include teachers shouting commands in preparation for a deep breathing practice or, even worse, students being tested and/or graded on their competence with mindfulness skills. A grassroots-like movement of exposing small groups of individuals to mindful ways of being might be a more promising course of action. In other words, starting small and creating ripple effects may prove effective. As I noted elsewhere (e.g., Powietrzynska, Tobin, & Alexakos, 2015), individual members of our research squad collective have begun this work in their respective communities.

Two of my identities were salient throughout the unfolding experiences I described in this chapter: my familial identity as a caretaker of a former spouse and my rapidly-gaining-prominence identity of a researcher. Taking cue from Tobin

(2012) I gradually adopt an "ontological stance that theory illuminates experience, affording participants making sense of their social life" (p. 2). Accordingly, in this case mindfulness theory assisted Piotr and me in identifying and traveling viable pathways towards healing. In addition, unexpectedly, a brief event during our mutual journey became an affordance for self-reflection and realizing how much of what we do happens without our awareness. It also reminded me of how challenging it is to relinquish the power we often assume as teachers especially when high emotional states are part of the structural flux. What this means for an educational arena is that teachers need to be familiar with research methodologies and they need to be encouraged to do research on their own practice. Teachers need to be able to increase their own and others' (e.g., their students') awareness of how classroom interactions are mediated by their conduct and the conduct of others. Teachers need to bring to their own and others' attention how raised voices and animated gestures may disrupt mutual focus and interfere with maintaining positive climates (Powietrzynska & Tobin, 2015). From a methodological standpoint, cameras may need to be part of teacher-led research to sharpen our individual and collective perceptions. It is essential to know that reflexivity affords a possibility of making transformations. As Tobin (2012) remarks, "thinking back on what happened during a science lesson with the purpose of identifying desirable changes necessitates evaluations being made about what is and is not working for the benefit of the teachers and students" (p. 4).

If schools are to provide preparation for life, they need to help our young people develop skills that will help them in life writ large. Skills like reflexivity and mindfulness promise to assist in slowing down and watching life in a frame-by-frame mode as advocated in a CNN interview by a successful businessman and a social and environmental activist Russell Simmons:

> The moving meditator is the watcher and he realizes that all that is outside is small and everything that's informed and important, inspirational and promotes happiness is inside. So all the outside is just fun. And you have to make the world fun. The idea of stress and anxiety that relates to "stuff" that comes and goes is self-imposed. (Gupta, 2014)

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FEDERICA RAIA AND MARIO C. DENG

14. MINDFULNESS OR RECURSIVE OSCILLATORY PROCESSES OF ATTUNEMENT?

ABSTRACT

Stimulated by recently developed heuristics on mindfulness and by the ongoing debate on the topic of destructive/non destructive positive/negative emotions, we – a complexity science education researcher and an advanced heart failure cardiologist – engage in a dialogue to understand the meaning of being relating to the Other as it emerges in video- audio-recorded medical encounters. We critically discuss the meaning and use of mindful practices and their relation to processes of attunement to the Other and absorbed coping. These are fundamental processes emerging in the complex interactions of high-tech modern medical encounters, as forty years ago it was unthinkable to live a life with an artificial heart, with somebody else's heart, or with an assist heart pump. Today, the technological advances of modern medicine make this possible. How such advances change a human being's life and how doctors can help their patients adapt to living with a machine implanted in their bodies and help the patient own this new life become prominent questions to address.

Keywords: relational presence, mindful focus, complexity, attunement, synchronization, oscillatory processes.

When I met Mario Deng, a cardiologist specialized in Advanced Heart Failure/ Mechanical Support/Heart Transplantation I became fascinated by the way he was talking about his medical practice in high-tech modern medicine:

Mario: '[it] requires a *relational presence* in an act that appreciates the moment of the relationship as privileged phenomenon, recursively integrating biological, psychological, and social level aspects within each encounter situation […]. It is a Relational*Act*, that has a specific temporal gestalt: a sequence of preparation, initiation, continuation and conclusion phases of the encounter. […] a *relational presence* that starts with *mindful* preparation for the encounter, by me, the doctor, saying to myself ('I am going to meet my patient in *this* moment in *her life* and with *this* medical condition …'), then, meeting *this* patient in the *initiation* phase of the encounter ('Hi how are you… how is life? …'), followed by the *continuation* phase of the encounter, appreciating all that the patient has to say as the irreducible

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 235–257.

starting and returning point of this medical encounter. And then the *conclusion* of the encounter ('it was good to have met you… let us summarize…').'

The questions then for me, Federica, researcher and educator, became: how does it look in practice? How can doctors in high-tech modern medical encounters zoom in from the person-level to the organ, tissue, cell and molecular gene levels; and then out again, back to the whole person level in one uninterrupted movement necessary for making diagnostic and therapeutic recommendations for *this* particular person? As Mario described, the starting point and returning point is *this* patient in his/her life. Then, how, within this framework, can doctors make sense of and meaningfully implement evidence-based medicine with its algorithm-based perspective that, abstracting from *this* patient, jumps to a shortcut of a translation of average population-based statistical phenotype level symptoms (Raia & Deng, 2015)?

The work we report in this chapter is based on a participatory research project studying experiences in the high-tech modern medical practices of advanced heart failure (Raia & Deng, 2014). The details of the Relational*Act* research model (RAM) designed and implemented to study the practice of high-tech modern medicine are reported elsewhere (Raia & Deng, 2014). The model proceeds iteratively in three stages of data collection and analysis, each generating, with continuity of representation, resources and structures necessary for the following stages to emerge: Stage 1. Participant Interviews: narratives of patients, caregivers and doctors experiences of high-tech modern medicine are collected. Stage 2. Encounter Recording and Analysis: routine high-tech modern medical encounters of participants are audio/videotaped for a period of 1–2 years. Stage 3. Cogenerative dialoguing (Elden & Levin, 1991; Roth & Tobin, 2004): advanced heart failure cardiologists, whose interactions have been recorded in Stage 2, participate in video recorded weekly two-hour-long audio/video-recording viewing sessions as part of the research team to make sense of their taped medical encounters and discuss the emerging elements and themes.

We take a phenomenological (Heidegger, 1927/1962) approach and do an existential analysis of the experiences of making life intelligible and meaningful to participants (Svenaeus, 2001) in the practice of high-tech modern medicine. In previous work (Raia & Deng, 2014) we show how high-tech modern medicine with its implementation of the advancements in technology, as is implanting and living with an artificial heart in substitution of an organic heart, is forcing new territories for us to live in. We also show that the higher the technological advances used in medical practice, the more relevant the value of human relations become. Physicians are faced with a new way of understanding their profession where the normatives regulating their work are the normatives of care (Raia & Deng, 2014). Rather than just supporting a patient in decision making, a central stance in this practice is to support a patient integrating medical science and technological advancements in *this person's life*, so as to develop a new sense of

self and ownership over specific critical health decisions and with the specific physiological manifestation and course of action (Raia & Deng, 2014).

In this chapter, we focus on the role of mindfulness as a practice that can help in the *preparation* phase (Raia & Deng, 2014) of the medical encounter to center oneself to be able then to get ready to meet the Other. We discuss how, based on this preparation phase, a *relational practice* is possible allowing to establish a doctor-patient relationship as a privileged space for a humanistically sound practice in high-tech modern medicine. We conclude with a discussion on the meaning of *relational presence* (Raia & Deng, 2014) and its relation to mindful practices as it emerges in our research. Below, in our roles of researcher (Federica) and practitioner discussing Mario's practice during interviews in RAM stage 1 (Mario), we refer to ourselves as *Interviewer* and *Dr. D* respectively.

MINDFUL PREPARATION TO THE ENCOUNTER (FROM RAM STAGE 1)

Interviewer: How does what you describe as the phases of the medical encounter look in your practice. You enter the room … and?

Dr. D: It starts before. Before entering a patient's room. It starts even earlier, in the morning, in my morning relational meditation exercises: My sun salute and my breathing exercises.

Interviewer: What do you do?

Dr. D: From the first morning Taoist breathing ritual, I take my breath as a purposeful inspiration with my body relaxed and then during expiration I squeeze my abdominal muscles as my powerhouse. I take purposeful breaths and I think: I am here. I am alive. I breathe and think how beautiful that I live with a person I love, how beautiful are all the things I do, researching, taking care of my patients, learning something new, for example, a guitar cord, etc. I concentrate on each main domain of my life. During the entire day I can reconnect to this relational presence morning ritual in every moment, for example, in the *preparation* phase of my Relational*Act* patient encounters. Before entering a patient room I just think about it while taking a few mindful breaths.

Interviewer: And then you enter?

Dr. D: No. Now I review the patient's medical record and I concentrate, as a person entering the room, and imagine/visualize the person I will be meeting and his story.

Interviewer: What do you imagine?

Dr. D: What has just happened in this person's life. For example, did this person just go through a major surgery or will be going to? Is it the first time I am meeting this patient? What is the patient's medical history? All these.

Interviewer: You imagine/visualize this person's entire story, the medical and non medical …

Dr. D: Yes, I have a singular sense of this patient as a person, including both the medical and non-medical aspects. And then I enter.

Interviewer: What does it feel like?

Dr. D: It feels like entering the encounter with openness to the encounter onset. During the opening of the encounter then, I am fully aware of and open for the other person, the patient. I feel the Other as a person because I myself feel in that moment as a person.

Interviewer: You described it as a *mindful* preparation for the encounter…

Dr. D: I refer for example to Connelly's definition of mindfulness as maintaining oneself in the present moment, requiring an effort to be aware of the passing moment (Connelly, 1999). A mindful preparation in this sense is a key element in my medical practice to get to the next step, a relational presence. I believe that when this attitude toward the Other and the encounter is present, it is also communicated when I meet the patient, making the patient feel as a person, more relaxed, comfortable and free to express any of her/his health and life concerns. I not only attempt to seriously listen to the patient, but strive to convey that I am taking seriously in every moment what I am hearing, feeling and understanding because this is the information that I am provided by patient for the diagnostic and therapeutic process.

Interviewer: Could you give me an example?

Dr. D: I was informed by my team that, Mr. Chaudhuri, 76 years old, who the team had recommended to undergo destination LVAD (Left Ventricular Assist Device treatment – a pump implanted in an open heart surgery to help a person's heart pump blood), was unable to make a decision. I entered the room, I established eye contact with the patient, I introduced myself to him and his wife, and I gave them my business card. At that point my mindfulness framework had transitioned to a state of relational presence, a

full immersion of myself as a person-body *with* the other person-body, the other person: a sense of intimacy that my patients call a *personal* encounter. From this moment of intimacy I can always retrieve in an oscillatory mode (i.e., moving back and forth between a conscious awareness and a fluid intuitive participation), if needed, the state of mindfulness that I prepared before encountering the patient. For example, in the encounter with Mr. Chaudhuri, when he told me about his difficulties in deciding, I needed to conceptualize myself in the role of the doctor who finds himself in the room with patient and family. There, in a more detached perspective that facilitates the retrieval of evidence-based medicine information, I envision *this* patient living with the two options, (1) optimal medical management, and (2) destination mechanical circulatory support, and associated outcomes according to evidence-based medicine.

Interviewer: And you then continue to be in a state of mindfulness?

Dr. D: Only as much as necessary. In the *continuation* phase, I am immersed, as much as possible, in a relational presence. With Mr. Chaudhuri, I had a conversation for about 30 min, and during this conversation, I *learned* from Mr. Chaudhuri that he was conflicted: on the one hand, he was considered by his wife and children to be the family's primary and traditional decision-maker. On the other hand, he could not make a decision. *He felt* he did not have a sense of *living* with an LVAD necessary to compare this option to the ongoing option of optimal medical therapy. After having outlined the role distribution in our encounter, "I am the white coat and I will offer you recommendations while you are the patient and are the boss over your body and your destiny and your decision" … the patient was ready to make a decision.

Interviewer: To *learn* this about Mr. Chaudhuri you must be in a relational presence that allows you to explore the "living with an LVAD" option.

Dr. D: YES exactly!

Interviewer: And by living, do you mean how does it look to walk around with it? How is life being-with-a machine half out and half in your body?

Dr. D: Exactly! The patient needs to know how it feels, see himself in it. It is his or her life.

Interviewer: So, you help Mr. Chaudhuri to have a sense of how his life with the LVAD could be, visualize waking up with it, walking, eating …

Dr. D: making love … living with the LVAD; making sense of it, imaging himself in his everyday actions, until Mr. Chaudhuri has a sense how it could feel like to live with a machine for him.

Dr. D talked as if these concepts were the most obvious in the world, the most obvious and the most important of the entire field of Medicine. From both Dr. D's and the other three advanced failure doctors' narratives it emerged that that the experiences of living with a machine, the experience in high-tech modern medicine needed to be understood in their own context and that for a doctor in high-tech modern medicine it is paramount to help the patient to have a sense of her/his life that now is unknown, as the patient does not recognize it as her/his own (Raia & Deng, 2014).

THE CONTEXT OF HIGH-TECH MODERN MEDICINE

Would anyone describe the last trip taken, let's say to New York City, by feeling compelled to specify that: while *I* was there, my left foot was also there? No, we do not consider ourselves separated from *our* body, nor as being a sum of disconnected parts: hands, heart, face, thoughts; it is *I*. My foot is not *a* foot. It is *my* foot and if it is the only thing I see in a picture taken during my trip, I feel that it is *me, I* was in New York City. We do not understand *being* as constituted by a sum of single body parts, experiences and identities that we can add, subtract or erase anytime to continue to be ourselves. Do we?

With the first heart transplantation performed on December 3, 1967, followed by the first implantation of a total artificial heart as a permanent device in 1984 and the first use of a wearable left ventricular assist device in 1994 substituting completely or partially a person's heart pumping function, high-tech modern medicine has opened new territories for humans to dwell in: could the 'motor exchange' so successfully practiced with our cars be possible for the heart in human beings? Were we taken one more step closer to immortality moving into considering a person's body made of disposable commodities? Is my heart an organ deemed valuable only to the extent that it can serve useful purposes? Forty years ago, these questions about our body were unthinkable as it was inconceivable living a life with a heart from somebody else or tethered to a machine, completely substituting your heart with a total artificial heart (TAH) or with a ventricular assist device (VAD, i.e., a Bi-ventricular assist device BiVAD, a Left-ventricular assist device LVAD, or a Right-ventricular assist device RVAD) that partially substitutes the heart function.

IMPACT OF HIGH-TECH MEDICINE ON PERSONHOOD AND BODY INTEGRATION

The experiences in high-tech modern medicine we have been studying in our research on advanced heart failure practice (Raia & Deng, 2014) are the experiences of patients with a failing heart. These experiences are at the same time experiences of a broken part and of a threat to one's existence, always inseparable in a person's life. Yet, in advanced heart failure, as a person becomes a possible candidate for replacing her/his malfunctioning heart with another person's heart or with an artificial mechanical heart, and/or a candidate for partially substituting the heart pumping function with a VAD, the gaze on the world where a person's body becomes a collection of separate components to be assembled in a human being, becomes possible (Sharp, 1995, 2006; Raia & Deng, 2014).

Only when one uncovers the functional aspects of one's body—or of the loved one's body—as substitutable broken parts, is it possible to accept the idea of a substitution of a permanently broken organ by heart transplantation or artificial heart or a substitution of part of the heart's pumping function by VAD implantation (Raia & Deng, 2014). Yet, experiences in high-tech modern medicine are not the kind of experiences that can be described by a motor exchange in a car as Mr. Morse recounts his experience: '*I felt like I was a science experiment, and it sparked a bit of fear in me to say the least!*' and as Mr. James describes himself while on BiVAD: '*like a scary character in the movies, half man, half machine.*' Or as the family caregiver, Ms. Kirsch, wife and caregiver for her husband, clearly expresses as decision maker in her husband's emergency surgery: '*I watched the nurse assigned to him [husband] after surgery operate this console and about 27 different bags and bottles going into his neck, groin, chest—every orifice. And I thought: What have I done?*'

BREAKDOWN OF SIGNIFICANCE

If a gaze into the properties of the heart and body, as well as their natural functions is possible, it is a gaze into what biomedical sciences study (Foucault, 1994). To understand oneself through such a gaze is to see one's own body as constituted by body parts, organs with their property and their natural functions. It is a gaze into something that Heidegger calls present-at-hand (Heidegger, 1927/1962), something that has been stripped of its role, its meaning in the person's relation in the world. It is only now that the decision to replace one's own organs, one's own heart can be made. But, there is no re-assembly of the person with the new parts, machines, organs, because it is not a motor exchange process. With a gaze into being made of substitutable parts, one finds her/himself lost. This is because the issue at stake is not only how to physically survive, but how to make sense of *being*, of who I am, how *I* make sense of the world, owning one's life, being-in the-world. To learn to live and interpret life with an artificial heart, with an assist heart pump, with the heart

from somebody else, a person will have to relate to things and make sense of their relations in the world as they are not recognizable and related to each other as they were before (Sharp, 1995; Raia & Deng, 2014). It is neither a conscious sense of who we are as persons nor the understanding of a body as an organic assembly of parts, separately needing to be taken care of. It requires a transformation of the collapsed unrecognizable world into one that is *familiar*. It is a transformation of a collapsed world into one that has *significance* (Heidegger, 1927/1962): the background upon which entities can make sense and activities can have a point (Dreyfus, 1991). This world needs to become familiar to the person taking the journey and needs to be *owned*[1] by this person (Raia & Deng, 2014). It is a rather difficult and subtle process of reconstituting the relational web that binds physical things, the machines and persons together into a meaningful whole, where actions have meaning for the person and, by that, reconstitute the person's identity (Heidegger, 1927/1962). In high-tech modern medicine, this is not a path where one can venture alone (Raia & Deng, 2014).

PERSONHOOD AND BODY INTEGRATION REQUIRES THE OTHER PERSON

With the experience of threat to one's existence, the role of the doctor in advanced heart failure is not restricted to taking care of the heart. It is not only making sure the immune system is not rejecting the donor heart, that an infection is not threatening the life of the patient, that if cancer develops, it is taken in time and spanning the medical expertise and implementing evidence-based medicine from gene to tissue to organ to patient level. No, not only. It requires also recursive movements from gene to tissue to organ to person-in-interaction levels to sustain *this* patient to live his/her life requiring making sense of the world, with a heart from another person or attached to a machine.

In high-tech modern medicine, as embodied in advanced heart failure practice, healthcare professionals tend toward attuning to the specific person, to the irreducible historicity of *this* person. When this is in place, the medical practice can unfold as a relational process integrating science, technology, body and personhood into *this* specific person's life (Raia & Deng, 2014).

With this context in place we can enter a hospital room where Mr. James, 31 years old, a marine, an artist, a son, a friend, and now a patient, is recovering from BiVAD implantation.

Mr. James is usually very loquacious, and participative. He also responds to the open question/salutation of the doctor of the *initiation* phase: 'Hello young man; how is life?' or 'Young man, how are you?' with a detailed description of the action taken during the day, his accomplishments and plans for the day as shown in the transcript (Transcript 1) of a medical encounter during his convalescence after BiVAD implantation:

RAM Stage 2 – Medical encounter – Transcript 1

1	Dr. D:	Young man, how are you?
2	Mr. James:	I'm doing well,
3		I went for a walk earlier.
4		I don't know if you've heard?
5	Dr. D:	I always hear good things
6	Mr. James:	Good, good.
7		Got some fluid off of me and
8		feet weren't killing me.
9		I was able to get up, go towards the hall.
10		Although I got out of breath and
11		my stomach started hurting so
12		I came back,
13		I got some oxygen and I uhhh
14		I sat down took it easy and
15		then I got back into bed after my stomach calmed down.
16		I'm going to try again a little bit later
17		for another walk I think and
18		tomorrow it should go even better
19		because I've been getting a lot of that fluid off of me.
20		I still have a long ways to go but
21		I'm doing better doing better
22	Dr. D:	I can feel it

With this example of encounter in mind, when on another day Dr. D enters the room and salutes Mr. James with his usual: 'Hi young man how is life?' he is surprised by Mr. James' response: 'I'm fine.'

This short response is followed by several seconds of silence. 'Click clack click clack,' the BiVAD pumping his heart continues its mechanical beats. Dr. D then continues (Transcript 2):

In Transcript 2, at line 5 the doctor resumes the conversation after a long silence calling upon both Mr. James' illness and disease journey as one integrated process. Here the illness experience is not just narrated and listened to but is utilized to care for the patient and therefore becomes integral to the medical encounter. From line 19, Mr. James continues the narration started by the doctor and shares his experience for the first time. It is an experience of estrangement waking up with the machine as

RAM Stage 2 – Medical encounter – Transcript 2 (adapted from Raia & Deng, 2014)

1	Dr. D:	so, on Friday a week ago when it came up
2		Friday morning was when we said let's do
3		the high emergency status for heart transplantation listing
4		and maybe we have an organ coming up during the weekend
5		That was also when we first met
6	Mr. James:	Yah
7	Dr. D:	and then we say ok and Dr. Hort was already little skeptical
8		and said maybe if anything happens we have to go ahead
9		and this was in the night
10		and so then it was clear
11		we have to recommend the Bi-Ventricular Assist Device
12	Dr. D:	How did it feel when the question came up with the assist device
13		you were prepared on Saturday morning
14		you know on the 12th?
15	Mr. James:	It was it was a little weird, you know,
16		kind of I mean (3.0 s)
17		It's just kind of
18		uh, uh a little trippy uhmm
19		hearing something like you know
20		like that
21		It weirded me out with gangliectomy you know
22		you don't wanna do it (2.0 s)
23		but if it's really for the best you kind wonna do it.
24		But it's just weird to think about it you know (1.5 s)
25		And uhmm I am glad it's happened you know (3.0 s)
26	Dr. D:	Yeah, yeah
27		It's a *big* (1.5 s)
28		thing
29	Mr. James:	Yes! (2.0 s)
30		Very big thing

part of one's own body. Dr. D is listening. There are long silences (1.5 to 3 seconds) in Mr. James' talk about his experience that are not interrupted by the physician.

Mr. James (lines 19–29) searches for words to describe his experience and refers to it as 'trippy' He does not name the BiVAD. Instead, he uses the word 'weird' three times (line 19, 25 and 28).

It is on the word, 'weird', that Dr. D operates a transformation, from 'weird' into 'big' (line 31); an important transformation of terms implying an estrangement from, if not a rejection of, what is defined as 'weird', 'trippy.' Coping with 'big' things *is* an accomplishment for Mr. James. With Dr. D he is transforming something so obtrusive[2] (Raia & Deng, 2014) into an accomplishment in his life. Together they transform trippy and weird things into big things: 'Yes! It is a very big thing', echoes Mr. James (line 34).

RELATIONAL PRESENCE – ATTUNING TO THE OTHER AS A RELATIONAL *ACT*

To operate the transformation of 'trippy' and 'weird' things into 'big' things, an attunement to the person sharing his experience is necessary. This can emerge as entering a rhythm in which a person responds to gesture, prosodic and linguistic patterns in the encounter (Raia & Deng, 2014). In Transcript 2, the rhythm is created by Mr. James' repetition of the same word 'weird,' his long silences to search for words to name and describe the experience and, at the same time, the avoidance of naming the BiVAD that a year later he will call 'my BiVAD.' The transformation operated by the doctor on what makes the experience foreign and scary, transforming 'trippy' and 'weird' into 'a big thing' is rapid. It is done in a few seconds and Dr. D is not aware at that point that he has performed a transformation as he comments on the encounter with Mr. James in a subsequent cogen session (RAM Stage 3), 'it feels right. This is a relational presence, a dyadic moment.' When probed to elaborate, Dr. D repeats that this is the way to do it, the right thing to say, 'it feels right.' More probing did not bring the conversation to a more explicit, rational and justifiable decision taken during the encounter on the transformation operated by the doctor. Consistent with Dr. D's description of being 'immersed, as much as possible, in a relational presence,' it was an intuitive response that felt appropriate according to Dr. D's sense of the situation.

In their phenomenological work on expertise, Dreyfus and Dreyfus (2000) describe expertise as the ability to intuitively discern and respond fluidly to the solicitations of the situation. This means, we cannot identify a rationally justifiable move to understand what Dr. D calls relational presence and neither does he; we need to find a different way to understand what looks like a process of attunement of the doctor to his patient's rhythm.

To understand attunement it is crucial to recall some rhetorical and rhythmical artifices often used in poetry as we recognize them here. The first, *assonance*, consists in the repetition of a sound of a vowel in non-rhyming stressed syllables that are close enough to create a sense of echo between them. The second artifice is

alliteration, also used in music with repetition of sounds, musical chords, melodic and rhythmic elements. Their function in poetry and in music is to enrich the texture of the poetic line or of a musical phrase and evoke particular feelings, enhancing the phonetic relationships between words or musical phrases.

In the medical encounter the transformation we*i*rd into b*i*g th*i*ng is facilitated by the rhythmic repetition of the sound/letter *i* and of the monosyllabic words.

The noticeable 1.5 seconds (line 31) silence separating the adjective and the noun 'a *big* (1.5) thing' is also very important in this transformation. In poetry, this delay of meaning contributes to the rhythm of a poem and is known as *enjambment*. This element breaks two words in the same sentence that should stand together as should subject and predicate, noun and attribute, one at the end of one verse and the other at beginning of the next. The enjambment creates a suspense released when the final part of the sentence is heard, giving greater emphasis to the words. In delaying the closure, a tension arises. The tension arises between the pause that is created by a line-end as the meaning is incomplete, and the necessity to continue to the next verse to make sense of the sentence. The pause of 1.5 seconds (line 31) after Dr. D uses the word 'big,' gives space to the words and a greater emphasis on the transformation.

31	Dr. D:	It is a *big* (1.5)
32		thing
33	Mr. James:	Y*e*s!
34		It is a v*e*ry big thing

The choice of transcribing the lines 31–32 as it were an enjambment was stimulated by the tension and justified indeed by this interpretation. Yet, differently from music and poetry, in the medical encounter the source of these phonic dimensions is not a rational move. This auditory complexity cannot be *mind*fully operated as the mind is not guiding the transformation. It is too fast to be cognitively organized or accounted for in a doctor speech in a medical encounter. Neither does this doctor write poetry nor is he an expert in the use of the prosodic/linguistic artifices to be able to use them in such a short time as an expert poet could use these tools transparently and quickly (Dreyfus & Dreyfus, 2000). Dr. D responds fluidly as Mr. James himself also fluidly can tune into (line 33–34), uttering Y*e*s, *I*t *i*s a v*e*ry big thing.

Dr. D gives an instinctual response requiring what Heidegger (1927/1962) calls a specific kind of forgetting: "A specific kind of *forgetting* is essential for the temporality that is constitutive for letting something be involved. The self must forget itself if, lost in the world of equipment, it is to be able to 'actually' go to work and manipulate something. […] familiarity in accordance with which Dasein as Being-with-the-other, … 'knows its way about'" (p. 405).

He performs it transparently. During the continuation phase of the medical encounter, where it is particularly necessary to enter in attunement with the Other to integrate, in this very encounter moment, the long-term perspective and the anticipated challenges of living with a machine (Raia & Deng, 2014), Dr. D, as he describes (interview, RAM phase 1), is 'immersed in a relational presence,' an intuitive fluid participation. Here his knowledge and situational understanding emerge as a sense of the appropriate thing to do ('it feels right'). Merleau-Ponty discusses various examples of absorbed, skillful bodily activities in engaging with space and spatial features: grasping the doorknob to go through a door, and organizing the hand in the shape of the knob without being aware of it, typing on a keyboard not by knowing the location of each letter on it or reacting by automatic reflex upon seeing the letter. It is, Merleau-Ponty says, "a question of knowledge in our hands, *which is forthcoming only when bodily effort is made, and cannot be formulated in detachment from that effort*" (p. 145). This skillful bodily knowledge is not driven by an agent trying to achieve a goal consciously or unconsciously, actively monitoring the feeling and thoughts, rather the "body of the performer is solicited by the situation to perform a series of movements that feel appropriate without the agent needing in any way to anticipate what would count as success" (Dreyfus, 2014, p. 150). In this way, Merleau-Ponty distinguishes these kinds of phenomena that he calls motor intentionality from intentional states as traditionally conceived (Kelly, 2000). Although the discussion of motor intentionality develops around issue of engagement with what is focally articulate, with space and spatial features (see Kelly, 2005 for a fuller account of this notion), our data show it emerging to the attuning to tempo, to patterns of sounds. Most importantly, this falling into a rhythm can only happen if a person participates in it "*which is forthcoming only when bodily effort is made*." Dr. D is 'immersed.' It is a Relational*Act*. As Taylor Carman (2005) argues: "It is easy to overlook the normativity of our bodily orientation in the world precisely because it is so basic and so familiar to us. Yet, Merleau-Ponty argues, that orientation constitutes a form of intentionality more primitive than judgment, more primitive even than the application of concepts. The rightness and wrongness of perceptual appearances is essentially interwoven with the rightness and wrongness of our bodily attitudes, and we have a feel for the kinds of balance and posture that afford us a correct and proper view of the world" (p. 70). Abstraction from the body, from being-in-the-world will not suffice.

Dr. D's response is an emergent phenomenon (see Raia & Deng, 2011 for a fuller account of the concepts of emergence as a complex causal phenomenon). It emerges from the attuning to his patient's experience. Falling into a rhythm created by repetition of words pushing to distance one from the estranged obtrusive scary experience ('weird'), and by silences and absence of Other's words pulling one in to make sense of the unsaid. It is in this tension between repetition and absence, between pushing away and calling forward the Other that being immersed allows a qualitatively different sense of the situation. In this *relational presence,* where to be a doctor means to help the patient to own her/his life, the

move becomes a transformation, of 'weird' into 'a big thing.' A powerful move to help Mr. James operate the necessary transformation, and own his life. How to attune to such a rhythm? Are there skills to learn?

A CRITICAL DISCUSSION OF THE ROLE OF MINDFUL PRACTICES

In our experience, mindfulness practices can help the person re-attune to her/his natural rhythm such as the breathing rhythm, as described by Dr. D in his morning rituals. In our society, targeting production and substitutability, these rhythms are often muffled or disrupted by stress. The constant running toward goals, the focus on productivity, the fast paces to produce, produce, produce can alter the characteristic oscillation patterns of these rhythms. A mindful focus on them can help a person learn to reconnect to one's own rhythms. Mindful breathing exercises, for example, help concentrating on one's own breathing rhythm, heartbeat rhythm, allowing the person to tune in her/his own natural oscillatory processes that happen without our conscious effort. We do not describe further any of the mindful practices to mindfully re-focus on one's own breathing or heartbeat or other natural oscillatory behavior, as it is described clearly in other chapters of this book and references therein. What we are interested in is what happens after mindfully re-focusing on one's own natural oscillatory behavior to be able to enter in a relational presence with another person. To do so, the next step must be entering a relation with another person's rhythms, being fully immersed in it. Attuning to the Others' rhythms is a process recognized in complexity science in different natural systems: from fireflies synchronizing their flashing, as observed in various parts of the world, to human hormonal synchronization, as for example experienced by women in prolonged close contacts synchronizing their menstrual periods (Strogatz, 2003). *Mind*ful practices, concentrating on one's own breathing, being aware and focusing attention do not suffice to account for synchronizing with the Other's rhythm. In this context, it is necessary to reflect on what we understand is the meaning of mindfulness and mindful practices we utilize. Specifically we are concerned with the fundamental ideas upon which they evolve in the traditionally rich and varied Oriental philosophical traditions and the use of only some of these practices and the translation of these concepts and practices into our socio-cultural-historical diverse contexts.

First, if mindfulness is built on the philosophical Buddhist tradition, then it is necessary to recall that the basis of this tradition is to resonate with and connect to the larger context of abstract meditation to something that is not ephemeral. Based on this, one must relate to a universal conception of an emotion. For example, let's consider meeting a person who is scared or angry, common feelings among the patients in high-tech modern medicine. To be able to relate but not be 'sucked into the dyad' with this person, an ephemeral presence, one must concentrate on the emotion 'anger,' abstracted from *this* person's anger, in *this* situation. Let the anger flow without entering in relation to this specific person. This allows taking

a detached stand operating purposeful steps to deal with the situation: anger. The same applies to the idea of love, the idea of compassion, as abstract entities to which one can enter in resonance. One therefore is not encountering and resonating with *this* person, *this* mortal, ephemeral life form, not relating to *this* person in pain, *this* person lost, *this* person angry, happy, in love. Malgorzata Powietrzynska (this volume) critically reflects on being compassionate. She reports on the possibility of becoming attuned to the abstract concept of compassion, independently from *this* person. Compassion in the abstract form is compassion that is not emerging from the relation to *this* particular person in front of me in *this* moment, it is not an affordance to which the involved person responds to in an immediate and unreflective way as a bodily inclination, 'magically,' as Merleau-Ponty put it.

In the framework of care, this abstraction is not possible to maintain because it is necessary, as we saw above, to attune transparently to another's rhythm, to fall into *this* person's rhythm and become part of it as Dr. D falls into Mr. James' rhythm, participating in it. It is a Relational*Act* of relating to *this person,* not *a* person, not a generic abstract idea of *a* patient, an abstract idea of pain, or being lost. Zen master Thich Nhat Hanh forsaking monastic isolation worked for reconciliation among the warring parties of the Vietnam War. His immersion in the lived experienced of others has modified his practice that he calls '*Engaged* Buddhism.' Thich Nhat Hanh's mindful practice, modified to be able to relate to a specific practice, is specifically targeted for those who live in a world of anger and violence and in need of re-establishing those natural human rhythms and relations. Without an '*Engaged*' stance, it is not clear to us how, abstracting from the ephemeral, we then can attune to *this* person's rhythms, to *this* person's rage, to *this* person's pain; How our own compassion can emerge for *this* person.

Second, knowing that in the Oriental religious and philosophical traditions and practices mindfulness is one of several important strengths to develop – one of the strengths in the groups of qualities paralleled by the spiritual qualities – we ask to reflect on the translation of these practices in goal oriented, production based, individualistically oriented societies. We often witness a commodification and reduction of these very complex practices in *mind*-governed practices to be utilized to reach specific goals. With full awareness and focused attention promoted by the breathing exercises and meditation practices, mindfulness is described in the English language as the *intentional*, accepting and non-judgmental *focus* of one's *attention* on the emotions, thoughts and sensations occurring in the present moment. It is a *state of active* and open *attention* on the present. When one is mindful *she observes* her *thoughts*, without judging them good or bad. In this common description many words resonate strongly with the dominant western culture from Plato to Kant accepting abstract thinking, critical detachment as higher and more sophisticated approaches and way of thinking and understanding than intuitive participation. If so, they are describing an abstraction, a goal oriented practice, a detached looking at one's thoughts, an intentional move departing from the immersed participation. If we start from this perspective, as we discussed above, as a person maintains

focus either on the own personal rhythm striving to maintain it, as for example regain a sense of self in the everyday stressed situation, or tuning into the not ephemeral, s/he cannot allow transparent (Heidegger, 1927/1962; Merleau-Ponty, 1962) synchronizing with the Other. Monitoring, being aware and focusing attention are modes of action peculiar to beginners who concentrate on the application of rules with a detached planning to deal with new situations (Dreyfus & Dreyfus, 2000). In such situation patient often describe the encounter, even if all was done and said correctly, as just 'it does not feel right.'

If we do not start from this *mind*-governed perspective, we want to understand what these activities and exercises are describing instead. From our phenomenological understanding, to define a phenomenon it is necessary to capture the ongoing unreflective, successful coping in-the-world. An expert level practitioner know-how, as Merleau-Ponty has it, "*cannot be formulated in detachment from that effort.*" A disturbance in the unproblematic expert's skillful coping can take a character of inspecting the situation, that is a temporary breakdown requiring entering into a mode in which what was previously transparently encountered becomes explicitly manifest (Dreyfus, 1991). This concernful deliberation (Heidegger, 1927/1962) brings to the fore, what was in the background and not noticeable and familiar, it captures the attention in need to be addressed in the specificity of the situation. The expert is not encountering de-worlded, de-situated entities (present-at-hand). When an expert theoretically reflects on what s/he is doing and experiencing s/he is stepping back from it, looking at it – a situation of interruption from being transparently involved (Heidegger, 1927/1962), abstracting essential points and rules to describe it. In describing mindfulness practices, the powerful exercises, we are given steps to learn to re-center our person, to regulate our life on the natural rhythms that have been disrupted; to start learning to connect in accordance with a fundamental tenet of Buddhism that one can begin to change the world by first changing how we look at the world. In practicing these mindful exercises we start experiencing and learn how it could feel '*it feels right*.' We are not yet fluidly meeting the Other. We start meeting ourselves. A 'big thing.'

In the immersed practices[3] of expert's compassionate listening, the awareness and anticipation of what would count as success, the observation of one's own thoughts and even the understanding of the "essences" of an emotion abstracted from the specificity of the situation, are no longer recognizable. Rather, affordances emerge as skillful coping in the specific moment and situation. They show up as an understanding not of an emotion, or a thought in isolation but of the mood of the situation to which one is solicited to perform a series of actions that feel appropriate. The linguistic artifices as emergent in a relational attunement process is an example of a process not detached and thoughtfully operated. A detached and thoughtfully operated process would result in a much slower pace

of the acts, and in the breaking in the rhythms of the encounter. The power to help Mr. James operate a necessary transformation is impaired and felt as loss of a sense of intimacy that patients call a *personal* encounter. In medical encounters of high-tech modern medicine, Dr. D is attuning to what Heidegger calls a mood, not as an inner disposition but as an attunement to our way of being, our life (pp. 134/172). Dr. D is attuning to how things are showing up for Mr. James. In a medical encounter this relational aspect is required to operate an important series of transformations, as we described, to help *Mr. James* reconstitute a web of significant relations in his life (Raia & Deng, 2014). For *this* person, now patient, attached to a machine, it is imperative to be able to accomplish small necessary transformations.

However, *a mindful practice to re-attune to one's own natural rhythms* is an essential skill for doctors to learn to allow their rhythm to come to the foreground and not be disrupted by stressors. As we discuss in the next section, these kinds of mindful practices are important in moments of breakdown (Heidegger, 1927/1962). They are crucial, for expert doctors, at times to detach themselves from resonating transparently with the specificity of the Other to then detail the medical options facilitating the retrieval of evidence-based medicine information, before translating them again into *this* patient's life.

ATTUNEMENT: A RECURSIVE OSCILLATORY SYNCHRONIZATION PROCESS BOUNDED BY RELATIONAL PRESENCE AND MINDFUL FOCUS

The doctor must be in relational presence to learn from the patient and feel 'the *living* with an LVAD' option for this patient. A mindful practice, 'a state of mindfulness,' being aware of being there when needed, helps, as Dr. D discusses, to: 'conceptualize myself in the role of the doctor who finds himself in the room with patient and family.' This move presupposes the emergence of a tension between transparently relating and detached focus. As such, the dynamics of interactions with the Other is opened to rupture and requires a continuous attunement with short-term moment-to-moment synchronization to the Other and to the dynamic situation of the encounter.

In Transcript 3, from another encounter between Dr. D and Mr. James, we show how the tension between transparently relating and mindfully focusing emerges with short-term moment-to-moment re-synchronization. During this encounter Mr. James has referred to Alaska as his soul place, and Dr. D has built on it to help Mr. James recognize a path, a horizon for himself, and start transforming his present (Raia & Deng, 2014). In the move to transforming his present, Mr. James offers the doctor guidance for a great life experience in Alaska, an unexpected and sudden change of roles, that the doctor feels particularly when Mr. James assertively says: 'I strongly recommend' (line 108):

RAM Stage 2 – Medical encounter – Transcript 3 (adapted from Raia & Deng, 2014)

108	Mr. James:	I strongly recommend
109		you to get up there one of these days
110		and do some good fishing.
111		(2.0 s)
112	Dr. D:	mmm hmm I think that's a good idea (LOWER PITCH)
113	Mr. James:	Yes, very much so (LOWER PITCH)
114		(2.0 s)
115	Dr. D:	Good idea! (HIGHER PITCH)
116	Mr. James:	Very much so! (HIGHER PITCH)

In cogen session (RAM Stage 3), listening to this passage of the encounter, Dr. D describes:

'I said 'I think that is a good idea' when Mr. James became very personal in his offer. So, the first time I said it's a good idea, I was taking his offer as, let's say, almost at a level of privacy into my personal life. I was not immediately jumping upon it. But I *re-mindfulness*ed *myself into the relation presence* after that moment. And then I just felt as person-person again and then I said 'a good idea!' (the second time). At that moment I felt, okay, it is just two human beings there. It took me a moment to get there though.'

Dr. D had to recalibrate his attunement to Mr. James as he felt a rupture to it. Dr. D's first response is flat and non-committal (line 112) (Raia & Deng, 2014). The utterance is, as indicated in parenthesis, in lower pitch (line 112) in comparison to Dr. D's second utterance (line 115). It has a closing flair to it with the sounds just dying into a silence. It is followed by a slow and equally lower pitch 'Yes, very much so' uttered by Mr. James (line 113).

Dr. D describes this passage in cogen as 'something was not right.' It is a rupture of the relational presence prompting him to realize that something is not right. It is a movement from an absorbed coping (Dreyfus, 2014) into a detached look that, bringing it to the foreground, makes it cognitively noticeable. From here, Dr. D mindfully, and therefore intentionally, refocuses on his role as a doctor who needs to support his patient making sense of his life with a machine. The rupture withdraws Dr. D from absorbed coping of being in a relational presence. The intentional act of mindful focus acts as a solicitation: 'I *re-mindfulness*ed *myself into the relational presence* after that moment,' initiating a new move toward repairing what feels wrong and allowing absorbed coping to take over to enact the repair on line 115 in Transcript 3.

From the perspective of the paradigm of absorbed coping, deliberatively assessing and evaluating emerges in cases of a breakdown of our transparently coping in the world (Heidegger, 1927/1962). This sequence: from (i) absorbed coping in a relational presence, withdrawn, into (ii) deliberate mindful planning, with a

conscious assessment of what is salient and a choice of action 'I *re-mindfulness*ed *myself*' and (iii) back into an absorbed relational presence allowing attunement to the other is *a recursive oscillatory synchronization process bounded by relational presence and mindful focus*.

In cogen:

Dr. D: It felt like yes, you go fishing with a friend, someone who's close to you. And those vibes had to, in that moment, just get generated and they needed to be real. You cannot fake that second 'good idea.'

Interviewer: You cannot plan it? Decide to do it?

Dr. D: No, it has to come out of the moment, to emerge in the interaction.

Interviewer: That is what you mean by relational presence?

Dr. D: In my world, I find it beautiful to have come to the second version of 'yes that's a good idea!' because from my fantasy of the patient's perspective he would say 'okay, I've done this, I go through the transplant, I go fishing and I can invite my Doc already now to go fishing with me.' And that is as good as things can get.

Note that Dr. D describes the move to a successful repair of what felt not right as 'I find it beautiful to have come to the second version'. The 'it is beautiful to have come to' describes a sense 'it feels right' and a sense of the move into absorbed coping. It is not a description of a decision, and assessment of a problem and a well-executed plan. Importantly, a mindful focus initiates the possibility of a new action during a breakdown as Dr. D describes: 'I go for this … wait a minute … how do I feel about going fishing there after just having talked about a ventricular assist device and heart transplant for him? It's a rapid transition into something else. So I need to go through my own identity at that moment: who am I in that encounter? And then I realize, I have been offering and I have been claiming that I'm in the encounter as a person. So I need to allow myself for real to just be a person. A radically naked person, you know, to just be a person. And that took me that time from the first to the second 'good idea…GOOD IDEA!' Dr. D's reflection upon his actions, are an example of breakdown from fluidly intuitively coping. It does not describe what he has done, and how he has taken up the affordance emerged, but his interpretation of it upon reflection. This does not describe what he did, but it gives us important insights in his stance of what being a doctor means to him; what it means being a doctor to Dr. D as a gestalt governs what solicitations show up in a situation, what counts as an affordance to him. As the second 'good idea' on line 115 to which Mr. James resonates with an equally increased pitch, cannot be planned, it has to emerge by attuning to the other, in a relational presence with the Other. However, how this is carried out depends on how Dr. D transparently now enters in a relational

presence with Mr. James to support him putting all into a perspective. A necessary act to reconstitute a sense of identity, a new identity interrelated to that of an expert fisherman. It depends on how the doctor takes a stand on his own being a doctor (Heidegger, 1927/1962).

From both the medical interactions and the cogen data it emerges that the Relational*Act* encounter is opened to ruptures. It is a dynamic process. Dynamic processes in complex systems are often characterized by oscillatory behavior, for example, in the human organism (Glass, 2001), in social systems, in love dynamics (Rinaldi, 1998). The *oscillatory synchronization process* where an intentional act is responsible for initiating the possibility of the action allowing absorbed coping to again take over, has been described in phenomenology of everyday perception and action (Dreyfus, 2014) and is consistent with the neuroscience account of the brain as a complex system (Freeman, 2000). In Freeman's model, the possibilities of the new action are shown to emerge as an attractor basin,[4] that is, a space, among other basins emerging in the energy landscape, characterized by a minimal energy state. In his model of learning, Freeman describes the animal's brain forming a new attractor each time the animal learns to respond to a new type of situation. Similar attractor basins are brought about by specific actions in a number of similar situations, the "sensory-motor system forms an attractor landscape that is shaped by the possibilities for successful comportment in that type of situation.' A concernful deliberation or even an intention in action (Searle, 1983), therefore, would "trigger absorbed coping, the movements of which would have motor rather than representational intentionality" (Dreyfus, 2014, p. 151). This complex model of upward and downward causation, action modifying the situation (upward) governed by the background[5] solicitations (Raia & Deng, 2011) is consistent with and can account for Merleau-Ponty's description of being drawn to making those movements that then result in a feeling of lowering of a tension—(brain-state approaching an attractor) (Dreyfus, 2014). In Merleau-Ponty's terms, Dr. D, in the encounter with Mr. James, feels drawn toward the second good idea (line 115) as a gestalt that cannot be predicted in advance.

Patient, family, and doctor all enter, as human beings, into a dynamic, evolving, adaptive person-person interaction. It is a dynamic process and as such it requires an oscillatory behavior. From a complexity perspective (Raia & Deng, 2011) what are often considered "negative" reactions, emotions or thoughts, as for example the one Dr. D had in the first 'good idea' interaction, are not to be discarded or judged but are necessary for the process of synchronization in interaction with *this* Other. The importance of being in a relational presence, in absorbed coping responding to the current interpersonal situation is not less valid than the intentionally purposefully focused act of being mindful. This is particularly important as mindful practices, originated in Oriental religious and philosophical traditions, are translated and translated into our western culture and contexts where, as Dreyfus (2014, p. 19) has it, it is imperative to call into question the "traditional Western and male belief in the superiority of critical detachment to intuitive involvement." Relating to the Other

as a Relational*Act is a recursive oscillatory synchronization process bounded by relational presence and mind*ful *focus.*

NOTES

[1] *Owned* is an important construct in Heidegger's work. The word *eigentlich* in Being and Time is usually translated with *authentic*, since its root *eigen* means own, *eigentlich* becomes an issue of appropriation, of making something one's own (Vattimo, 1980).

[2] Obtrusive (Heidegger, 1927/1962) here is used to indicate the mode things show up when significance and familiarity collapse and the person remains bewildered and inhibited unable to act.

[3] "Compassion isn't just about feeling the pain of others; it's about bringing them in toward yourself" Boyle (2010, p. 75).

[4] The resistance to change of a system or its stability upon perturbation define a basin, a displacement from which recovery can occur.

[5] Here for background we intend the world familiar to us, that has significance to us (Heidegger, 1927/1962) in our understanding of what it means to be a practitioner (Raia & Deng, 2014).

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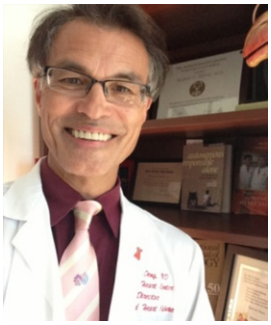

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AMY GOODS

15. THE POSSIBILITY OF PLAY

Understanding the Transformative Nature of Play and Exploring Possible Applications for People with Alzheimer's

ABSTRACT

In this chapter I aim to explore the transformative power of play and the possibilities of encouraging play to empower people with Alzheimer's disease and memory loss. I begin with a personal narrative involving a visit with my father. At the time of this visit, my father was in the advanced stages of Alzheimer's disease and was residing in the memory loss unit of an adult day center. Questions about the possibilities of play as a modality for increasing autonomy and agency in people with Alzheimer's disease and memory loss emerged as I spent time with my father and observed the actions of he and others with memory loss. In this chapter I begin to investigate the philosophy and role of play in society as I examine theories of play by scholars such as Lev Vygotsky and John Huizinga. These theories are tempered with my own impressionistic experiences and mindful observations while engaging in playful activities with people with Alzheimer's disease and memory loss.

Keywords: Alzheimer's disease, memory loss, play, wellness, mindfulness, compassion

A VISIT TO THE MEMORY LOSS UNIT

To visit the memory loss unit, I first had to check in with the guard; showing identification and signing the giant guest book located in the corner of the cold grey slab of the desk. I then walked down a long hallway past an abandoned café, an empty courtyard, and an extensive physical therapy room that seemed to be used on a day that I was not visiting. At the end of this long, pale, lavender hallway was an elevator that would jump to life as I entered the four-digit code that would take me to the fourth floor.

Upon arriving on the fourth floor, the doors of the elevator would open into a small pink room, on the walls a pixilated print of a painting of a field of flowers and a small house. Once the doors to the elevator closed, a four-digit code was entered again, opening a secured door into the memory loss unit.

M. Powietrzynska & K. Tobin (Eds.), Mindfulness and Educating Citizens for Everyday Life, 259–269.

The memory loss unit was set up like a hospital. The nurse's station faced the elevator doors, and catty-cornered the two long, straight hallways with evenly spaced square bedrooms on each side. Each of the 24 bedrooms housed two identical beds, a bathroom, and an armoire to store personal belongings. Scattered about the bedrooms were personal effects that families had brought in; old black and white pictures of men in army uniforms, a wedding photo, a homemade quilt, a baseball cap.

The doors to the rooms remained open at all times, and, for the most part, all those who were able to be mobile did not spend much time in the rooms. The people of the memory loss community seemed to congregate about the common room across from the nursing station. There is where they ate their meals and generally sat and paced about.

Though nearly all the members of the memory loss unit tended to find their way to the common room, upon inspection, there seemed to be very little community interaction. People were talking and singing, though seemingly not to or with each other. Some were wandering about, shuffling around the room in a pair of socks, seemingly looking for something they may have lost long ago.

At the time I arrived, lunch was being served. A cart was wheeled out, full of plates of ham sandwiches and bowls of cream of broccoli soup. The nurses began to help the residents find a seat in the common room to be served. A man walked up to a nurse. His face scrunched, his breathing heavy, he looked nervous. He said that he couldn't eat; he did not have time, because the train is coming and he cannot be late for work. The nurse smiled and put her arm in his. She told him that the conductor radioed and the train is running late. He has time to eat before it comes. His face relaxed, seemingly relieved, he said, "ok," and took a seat for lunch.

METHODOLOGIES

The extent of my understanding of people with memory loss living in nursing homes and rehabilitation communities goes deep, but is not wide. I write from my experiences and impressions as I try to empathize, identify with, and gain a deeper understanding of how my father was experiencing life while living with Alzheimer's disease. My informal observations of the memory loss unit were gathered through conversations with my mother and observations of social interactions as I visited my father in the memory loss unit during the last three months of his life. I was so moved by what I saw when visiting that I felt an obligation to speak about the conditions in which people, human beings, were/are existing. As I spent more time around the retirement community, I was able to see beyond the pixilated pictures on the walls, the security desks, and the drab décor to see the random acts of compassion and truly mindful and playful interactions that seemed to be emerging organically between caretakers and people with memory loss. I began to wonder how adopting a framework of play might transform and improve the quality of life for both people with memory loss and their caretakers.

I am aware that there are limitations in my ideas about encouraging play in people with memory loss. Throughout my observations I was a transient visitor – an outsider, no video or audio recordings exist. I am reliant on my own memory and ontological framework. This is my own experience, an impressionistic tale, an amalgamation of many moments, strung together to create an image of a time past.

I aim to research play in people with Alzheimer's and memory loss using Guba and Lincoln's Authenticity Criteria (Guba & Lincoln, 1989). I hope that through researching play I am able to infuse a little more joy into the lives of people that I research (ontological authenticity). I believe that play has the possibility to be a low-cost, low-stakes intervention that would benefit all participants. As caretakers of people with memory loss engage in positive and playful acts with the people they are caring for, they share an emotional reciprocity. I believe that it is through this positive emotional sharing that people with Alzheimer's and memory loss and their caretakers can potentially increase agency and autonomy. Compassionate and mindful play has the possibility to transform and empower. Play with the kindest of intentions has the possibility to make all participants a little happier for having participated.

ALZHEIMER'S DISEASE

Alzheimer's Disease is one of the most common forms of dementia and is characterized by memory loss that accelerates as a person ages. This memory loss typically begins in the middle to end of one's life spectrum. Alzheimer's is associated with certain physiological changes to the brain. Years before there are any clear symptoms of memory loss, plaques begin to develop between the neural connections within the brain. These plaques, made of a protein called beta-amyloid, begin to interfere with typical neural function in the brain, inhibiting neurons to make connections with each other. Additionally, a person with Alzheimer's may have "tangles" throughout the brain. These "tangles" are made of a protein called tau that forms large fibrous masses in the brain. The combination of beta-amyloid plaques and tau tangles results in neuron decay and death (Alzheimer's Association, 2015). As a result, a person with Alzheimer's loses memories, typically starting with short-term memory, progressing to loss of long-term embedded memory, and finally with memory of how to use one's body.

In today's society, loss of memory is often synonymous with loss of autonomy. In the case of my father, forgetting the placement of keys, phone numbers of friends, and the answers to the Sunday New York Times crossword puzzle soon progressed to forgetting where he lived, who his loved ones were, how to eat on his own, and where and when to go to the bathroom.

A quote from a recent article in the New York Times Magazine beautifully captures the progression of Alzheimer's. "Others had stories like his, about people who watch their loved ones slip away, or people who go through the slipping away themselves, and are surprised to find a kind of grace in it: the Zen-like existence in

an external now, the softening of hard edges, the glorification of simple pleasures" (Marantz Henig, 2015). This is how I would like to think it was for my father and is for many others living with memory loss.

I believe that in the first half of our lives, much of our time is spent looking forward, imagining, constructing and reconstructing life as we wish it to be. In comparison, a person at the end of his/her life may spend much time looking back into the past. In the case of my father, at least, much of his daily life seemed to be spent in another time. Past memories seemed to float in and out of his consciousness. At times, he seemed to be re-living aspects of his past, calling me by his sister's name, listening to music from the fifties and asking young ladies to dance as if he was back in high school, looking for his briefcase and getting ready for work as if he still rode the train to New York City every day.

There were also times that my father seemed to be securely situated in the present, mindful of the minutia around him. There was a beautiful simplicity about these moments. A person who had previously always seemed to be deep in thought, his mind always seeming to be going a million miles an hour and a thousand miles away, was now content to sit in the back yard, soaking in the sun, the smells, the flowers, and remarking, "How amazing it all was."

Though Alzheimer's disease did expose his "soft edges," our experiences and interactions with him were not always light-hearted. He would often get confused and disoriented. He would insist that the house that he was living in with my mother was not his home and demand to go home. If we told him that it was his home, he would become more agitated – violent even. So we started to go along with him in whatever state of being he was in. Essentially, we began to "play" with him.

PLAY AND MINDFULNESS

As I began to engage in research on play, defining and therefore identifying play became a challenge. Play, it seems, is an amorphous phenomenon that appears to shift shape depending upon who the participants of play are. The act of play has been described as engaging in make-believe scenarios such as playing house, or pretending to be police officers or firefighters. It has also been described as a game of tag, chess, soccer, or video games. Some view play as roughhousing with friends, climbing a tree, or building a sandcastle. Some see play in drawing a picture or writing a silly poem. Others experience play when betting on black jack or dancing to music. To the participants, all are examples of play. Johan Huizinga (1980) writes, "The various answers they [participants] give tend rather to overlap than exclude one another" (p. 2). It is in this overlap that Huizinga begins to carve out the following epistemological framework of play.

First, play is a free and voluntary activity (Huizinga, 1980). This is not to say play is without rules. On the contrary, a framework of rules constructed by the participants binds most social play scenarios. The freedom of play does not come

from an absence of rules, but rather lies in the joy of playing. It is in this joy that the participants find freedom.

Second, when engaging in play there is an absence of material consequences (Huizinga, 1980). In other words, a participant in play can construct a scenario, such as caring for a baby, and can experience emotions that go along with caring for a baby, as s/he engages in a creative and dynamic setting, exploring possibilities of action, without truly engaging in that action.

Third, the action of play may have a specific space, rules, and/or equipment (Huizinga, 1980). Take, for example, the man in the memory loss unit who did not want to eat lunch because he would be late for work. The nurse seamlessly entered into his constructed reality of the situation. She could have told him that he hadn't worked in years and that he was in a unit for memory loss, but instead she met the man in the space that he had constructed, using the rules that he had put forth. Within that space she was able to guide him into eating a meal, calm him, and put him at ease.

In the above examples, play is described through a lens of positivity. Play, in the sense that I explain it in this chapter, exemplifies connectivity, inter-personal reciprocity of care, love, and compassion for the other. However, I feel it is important to note that play is not necessarily all of these things. Play has the capacity to be destructive and mean-spirited. The nature of a playful interaction is formed through the actions of the participants. As I examine play and its application with people with Alzheimer's and memory loss, I choose to focus on play that is coming from a place of respect, care, and love; for I believe that in this type of play there are transformative possibilities in communicating and interacting with people with memory loss.

One of the challenges in researching play in people with memory loss is that an individual's perception of play is contingent on how the individual is making meaning of the action in which s/he is participating. It is hard to say whether or not a person with memory loss is conscious of the construction of the rules in play. For example, a person with memory loss may really feel as though the baby doll that s/he is holding is her/his own child, or that if he stops to eat lunch that he will truly be late for work. However, as the people with memory loss construct the rules, and as others (including caretakers) go along with these rules, I believe that a person with memory loss does experience a sort of freedom to safely and happily exist in the reality that his/her mind and memories have created for him/her.

As a person interacts with another person with memory loss in a playful manner, s/he is acting with compassion. I believe that to truly engage in play, to slip into a constructed world of another human being, one must be deeply aware of the needs of the other. The person must be aware of his or her surroundings, of the scenarios put forth by another, and adapt her/his own interactions to meet the needs of the person with whom s/he is interacting. The person must be able to empathize. When slipping into a play mode, there is, for a moment, a lack of judgment, openness, and acceptance of the other. This, in its essence, is mindfulness.

PLAY AND EMOTIONS

Before my father needed the 24-hour care of an assisted living facility, he used to attend an adult day center. Every weekday morning a bus from the adult day center would come to pick up my father so that my mother could go to work without worrying about my father's safety. Everyday, my father would forget that he was leaving to go to the day-center and would not want to leave the house to get on the bus. My father would insist he was not going anywhere. Getting him out the door was a daily challenge.

One day the attendant from the adult day center had an idea. She walked into the house and gave my father a big kiss on the lips. This made him giggle. She said, "Come on Ed, it is time to go to work." He immediately smiled and got on the bus. Once he was on the bus my father was quite amicable, telling the bus driver at every stop that he was "doing an amazing job."

The bus attendant could have walked through the door to my parents' house and insisted that my father get on the bus. She could have yelled and demanded. She could have fought with him. If she had done this, her negative outlook and demeanor could have spilled into the rest of the day, influencing all those around her. Instead, she chose to play with my father. She constructed a scenario that would entice him onto the bus with a smile. Her actions made both my father and her giggle. They boarded the bus arm in arm, a smile on both their faces, making everyone on the bus smile as well. Everyone involved was a little happier for having this interaction.

Jonathan Turner (2002) writes, "All face-to-face interacting is emotional. Natural Selection made humans emotional and […] emotional syntax is the primal and primary language of our species" (p. 231). With Alzheimer's, a person slowly begins to lose language. With my father, words increasingly became difficult to articulate. Sentences became a jumble of non sequitur nouns and verbs. Conversations fell by the wayside as they stopped to make sense, both for me and, it seems, for him. However, until the very end of his life, my father was able to respond to emotions. He was able to pick up on the vibe in the room. If we were sad, he too was sad. If we were happy, he too was happy. Holding his hand and a smile were the best ways to give life to his increasingly vacant demeanor. A giggle and a hug brought life to his face.

This emotional reciprocity is one of the reasons that I believe engaging in play with people with Alzheimer's has the potential to be transformative. In this example, play is inherently fun. It makes us smile, laugh, and lighten our mood. Play, in turn, helps all those around us lighten as well. Because the attendant engaged in a playful scenario with my father, he was happy once he was on the bus and started to participate in the activities of the day. We saw this in the pictures my mother would receive via text message and email of my father joining in various activities; dancing, walking on the beach, enjoying coffee with friends, all with a big smile on his face. He was safer and happier at the adult day center than he was at home.

This attendant's act of play eased a confusing and difficult transition for him and ultimately made all participants' days a little smoother.

The attendant's interventions while assisting my father also gave my father the opportunity for my father to "become aware of the unaware" (Powietrzynska, 2014). With a playful kiss, the attendant helped my father to conjure the joy that was within him and move forward to fully participate in the day's activities. In that moment, I believe that the attendant helped my father to be mindful of his surroundings and awaken to the kindness and caring intentions of the people surrounding him.

We, as a family, learned from this interaction. As my father progressed deeper into Alzheimer's, he would spend many a night pacing about the house insisting that we take him home. We would gently tell him that he was already home. This would make him more and more agitated. He would begin to curse at us and yell that we needed to take him home. We in turn, would become upset because we felt as though no amount of reasoning could alleviate his stress about wanting to go home. We could not figure out where he thought home was. We felt that we could not take him where he needed to go.

Finally, we had an idea. We told my father that we were going to take him home. We walked him out to the car and got in. We turned on the car stereo to his favorite music, Bob Dylan, and drove around the block. My father at once began to relax. Five minutes later, we reentered the driveway to our home and got out of the car. We announced that we were home. My father thanked us for an "amazing job driving" and reentered the house, calm, relaxed, and happy.

We had just engaged in an act of play with my father. Together, we had constructed and defined the rules of the game (going for a ride around the block to our "home"), we used specific equipment (the car and music), and there was an absence of material consequences (we arrived back the very same place that we started, pretending it was a new place). We reacted to my father's anguish and confusion with compassion. We slipped into his reality (that he was not, in fact, home) and, through being mindful of his needs, we together constructed a new reality in which my father could find solace. In this act of playing with my father, existing in his constructed reality, we were able to connect with him and help him to be happy.

PLAY IN PRACTICE

In the Fall of 1981, Ellen Langer conducted a study in which eight men in their 70s went on a retreat to a monastery in New Hampshire. The monastery had been converted to appear as though it was 1959. Everything inside, the TVs, books, magazines, furniture, clothes, and eating utensils, were identical to objects that would have been present in 1959. The men staying at the monastery were expected to act as if it was 1959 and they were 20 years younger. What Langer found was that the men in the experience actually seemed to reverse some telltale signs of aging.

In viewing before-and-after photos, independent interviewees actually thought that the men appeared younger. The men had increased manual dexterity, were more independent, and were happier (Langer, 2009).

Though I do not know if Langer herself would agree that the experience she created was an act of play, I believe it fits the criteria set forth above. The men voluntarily engaged in an activity that created/recreated new/old constructed reality. The participants were temporarily released from the consequence of aging as they allowed themselves to shift back into a time when they were much younger. The participants existed in a specific place, with specific objects and rules that assisted the men in shifting their ontological framework.

Lev Vygotsky has said that through play, a child becomes "a head taller than himself" (Vygotsky, 1978). This famous quote rests on Vygotsky's assertion that through play a child is operating within his or her Zone of Proximal Development (ZPD) and is therefore performing at a "higher level" than when not engaged in play. Were the men in Langer's study performing at a "higher level" because they were engaging in a new/old constructed reality? Because they were, in a sense, playing?

I believe that the men in Langer's study also experienced compassion through play. Through this study, Langer was able to empathize with the men, helping them to construct and exist in this world of the past and ultimately relieve some dis-ease of aging. The participants in the Langer study played that they were 20 years younger, and through this playing, the men were able to shed the constructed reality of aging and awaken to the possibilities of youth rediscovered.

What can this experiment tell us about the power of the mind? How did a shift in place and action contribute to a shift of the physiological signs of aging? Richard Davidson, a neuroscientist, writes extensively about the way the brain is constantly changing in response to experiences. The term that Davidson uses to define this phenomenon is "neuroplasticity" (Davidson & Lutz, 2007).

Human beings have amazingly plastic brains. During our early childhood we especially experience an explosion of neural activity. It is this explosion of neural activity that aids young children in acquiring vast amounts of language, dexterity, and allows for the acquisition of many cultural and developmental milestones in a relatively short amount of time (Wilson, 2013). Though this neural development may slow as we age, it does not have to limit our capacity to learn, grow, and experience new things. Tried and true strategies used with developing children could potentially hold merit with adults.

We cannot and should not limit our ideas about human potential and possibility to the development of the brain during childhood. John Dewey (1916/2004) warns us of the dangers of ascribing to the idea that adulthood is the end of growth, writing:

> The fulfillment of growing is taken to mean an accomplished growth: that is to say, an Ungrowth, something which is no longer growing. The futility of the assumption is seen in the fact that every adult resents the imputation of

> having no further possibilities of growth; and so far as he finds that they are closed to him mourns the fact as evidence of loss, instead of falling back on the achieved as adequate manifestation of power. Why an unequal measure for child and man? (p. 48)

A human being has the ability to learn, grow, and develop throughout his/her lifetime. However, it is the formation of the brain during childhood that has garnered much attention and curiosity throughout human history, prompting many cultures to adopt practices of teaching and learning during this time in various modalities throughout the world (Lave, 1996). Extensive research has been done on the effects of play on development in children. There are whole academic journals dedicated to the subject (e.g., The American Journal of Play, Play) and many anthropologists, developmental psychologists, teachers, parents, principals, children, and zoologists all tout the benefits of play on development. But why is it that the examination of play and its potential benefits ends in childhood. If play is so important to the development of children, then can the benefits of play also be beneficial to the development of adults?

In my mind, the term "development" goes hand in hand with "progress." Progress is often defined as moving further, forwards (Merriam-Webster, 2015). It is difficult to think of someone in the throes of memory loss as moving forward, as progressing in a positive way. However, I believe that we need to shift the paradigm of how we think about aging. I believe that we can apply Vygotsky's theory of ZPD to the people with Alzheimer's/Memory loss if we shift the way we think about development and aging from palliative care to transformative action. In applying ZPD principles with people with Alzheimer's/Memory loss, we are not limited to thinking about development as growing and learning to be an adult but may also consider development as including building social relationships, increasing mobility, increasing engagement with surroundings, and promoting a general feeling of happiness.

Play gives us purpose, through this purpose, people with Alzheimer's gain agency. As a person progresses into Alzheimer's s/he slowly lose her/his autonomy. Men or women who had previously spent their days working with their hands, solving problems, driving, cooking, and making their own decisions may all of a sudden find themselves emotionally and/or physically trapped. When children play, they often play at being an "adult." We can allow people with Alzheimer's to do the same. Play in children aids in development. Perhaps by facilitating play in people with memory loss, we can actively engage their brain, and in consequence help them to develop in a positive way.

Langer observed increased mobility, increased engagement, and increased happiness with the participants of her 1981 study (Langer, 2009). I believe that if we actively engage in play as caretakers of people with Alzheimer's/Memory loss, we will see marked improvements not only in the residents of memory loss units, but through emotional reciprocity and mindful interactions, we will see improvements of outlook in ourselves.

My mother used to say that in caring for my father, if we did not laugh we would cry. Just as caretakers have the ability to join in the constructed situations, caretakers also have the ability to participate in the construction of the pretend activity. I recall sitting around our kitchen table for dinner and my mother saying, "Watch this." She turned to my father and began to laugh about nothing at all. My father too began to laugh heartily. In turn, all of us, sitting about the table began to laugh together. We shared an emotional reciprocity, an interconnectivity of feeling and being. In this interconnectivity, we had a choice. We had the power to enact happiness and playfulness, to be creative and imaginative in our interactions with others. In doing this, we entered into a sort of Möbius strip of positivity, love, and trust, transforming the outlooks of those around us. Through these interactions, we are able to elicit some happiness in what sometimes felt like bleak and sad times. When actively engaging play and laughter, we as a family, were all better off for having participated.

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