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*Minding Your Life*

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## *Realizing True Education with Mindfulness*

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**Abstract:** True education has as its aim to awaken the student to him- or herself and to the world. We can find helpful guidance for accomplishing this in the Buddha's teachings on the seven factors of enlightenment (joy, rest, concentration, curiosity, diligence, equanimity and mindfulness). In this article I discuss impediments to the realization of these factors that exist in current education. I then describe approaches based on mindfulness that I have used to address these obstacles and promote each of the factors of enlightenment in a secondary school setting. I include readings I give to students and student descriptions of their experiences with this educational approach.

### **INTRODUCTION**

Education at younger and younger ages is seen today primarily as a means for obtaining success in the future. This focus on future attainment works against the first factor of enlightenment, experiencing joy in the present. Joy is further eroded by the sense of competition and isolation that some students experience. Because students believe that the possibility of happiness in the future depends on how much they are able to accomplish in the present, they are continually engaged in doing, shortchanging and devaluing the second factor, rest. Due to multitasking, with many things to attend to, and thinking ahead to the results they hope to attain, the quality of many students' concentration, the third factor, is poor.

The results that students hope to achieve are often dependent on their success on examinations of prescribed knowledge and skills. This has a negative impact on their natural curiosity, the fourth factor. As students grow older, these conditions lead to an increase in negative mind states such as anxiety and anger. The antidotes, inner awareness and habits that promote well being on an ongoing basis, constitute the fifth factor, diligence. However, education typically focuses students' attention outward and places no value on, nor allots time for, their inner lives. Negative mind states proliferate, leading to unhealthy, sometimes chronic, stress, as equanimity, the sixth factor and one of the most important of these habits, remains undeveloped.

Mindfulness, the seventh factor, is the key with which students could open the other factors. However, narrow focus on

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achievement, overemphasis of critical thinking, and absorption with the future all work against students' developing the ability to be fully open to the richness of the present moment.

The approaches to address these obstacles that I will suggest in what follows are primarily ones I have used to promote mindfulness in secondary education. At this level students' brains are well developed but so too are their unhealthy habits of thinking. Also at this level, pressures on many students increase. I have used some of these approaches in fourteen years of teaching a class on stress reduction to all 9<sup>th</sup> grade students in my school. Others were developed two years ago when I added a mindfulness component to Math II, our 10<sup>th</sup> grade honors geometry course, starting each class with free writing or journaling in response to poetry, stories, or quotations (some are included in what follows), with meditation, or with yoga.

## I. JOY

Creating a joyful sense of community within the classroom has always been a high priority for me. For many years my students have spent most of their time in class working cooperatively in small groups. At the start of his June 1992 retreat, Thich Nhat Hanh gave each of us a sticker reading, "I walk for you" to put in one of our shoes. Seeing it each time we put on our shoes to go outside for walking meditation, we would be reminded that the naturally graceful walking of another retreatant could help support us to walk more beautifully rather than be a source of jealousy or a cause for self-deprecation. Later that summer I had stickers made that said "I learn for you." I asked my students to put them on the front of their book covers to remind them each night that they are doing the homework not only for their own benefit but for the benefit of the rest of the class as

well. At the same time, the other students are learning for them. I've also asked students to write thank you notes to other members of their groups when each unit comes to an end, an activity that is eagerly awaited and engaged in by the students. Two years ago I added a new mid-unit group awareness activity, asking the students to do free writing to the prompt "My group...." Then I asked them to reflect on ways their group could be more effective and write in their journals things they could do differently to help this happen. These practices helped the class develop into a mutually supportive Sangha.

Cooperative learning provides an efficient means for students to go over homework and opportunities for them to become aware of different solution methods. Working on challenging class problems together gives students opportunities to develop group problem-solving skills. Whether working on problems or going over homework solutions, group activity promotes happy engagement in the present moment in a way that listening to a teacher talking at the blackboard often fails to do. Placing an emphasis on mindfulness adds new dimension to student groups. Reflection and contemplation come naturally to some students. Their stillness, concentration, and journal writing support other group members in becoming similarly engaged. One of my colleagues, after visiting a Math II class, told me how impressed she was with the quality of the group discussions of problems, connecting this with the unhurried pace and focus of the class established by the opening period of silence, reading and journal writing.

A student, commenting on the memories he would take away from his math class, said:

I will cherish every day's fun conversation and banter, for I learned much, even when off topic. It was immensely enjoyable and by far

my favorite class. The atmosphere was just the way it should be, an optimum learning environment.

## II. REST

On returning from my second retreat to Plum Village, Thich Nhat Hanh's monastic retreat center in southwest France, I presented an assembly at my high school about my experiences. I included the story of Chris, who, as a senior several years earlier, had been the first meditator I'd encountered. He had shared his 3-week senior project experiences at a local Zen center. At the end of his presentation, a student asked Chris whether his meditation had had any effect on his life outside the zendo. Chris responded that many of the effects were subtle and difficult to articulate. "However," he continued, "I can say that I am less angry as a result." At the close of the assembly, I led the whole high school in a two-minute sitting meditation. A few days after the assembly, Audrey, a twelfth-grader, shared this experience at our all-school worship meeting.

I've been thinking about the fact that the main change Mr. Brady's student noticed in himself after he had been meditating on a regular basis was that he was less angry. Lately, I've been so angry myself because I've had all this resentment building up inside over responsibilities that I have to fulfill. I really want to let it all go, but I can't. This makes me even more resentful and angry. The other night I was sitting at my desk around 12:30 a.m. completely stressing because I had so much work to do. I was on the verge of breaking. But I just closed my eyes and took in ten deep breaths, concentrating on my inhaling and exhaling the whole

time. When I opened my eyes, I was so relaxed. If any of you are feeling stressed out or angry, just take ten seconds to close your eyes and breathe. The action is so little, but the reward is tremendous.

I include this last story in my stress reduction classes because it provides a good opportunity for me to invite the participants to move, as I did, from learning about meditation to practicing it. I then led the group in a 10-minute guided meditation, using the following guided meditation (see Nhat Hanh, 1993, p.21):

Breathing in, I know I am breathing in.  
Breathing out, I know I am breathing out.

Breathing in, my breath grows deep.  
Breathing out, my breath goes slowly.

Breathing in, I feel calm.  
Breathing out, I feel ease.

Breathing in, I smile.  
Breathing out, I release.

Dwelling in the present moment.  
I know it is a wonderful moment.

In my math classes I've used a *ringong*, a small Japanese bell. I sound it at the beginning of class and from time to time to help the students stop and center themselves. Time seemed to stop during those brief moments. The students respond to the bell with respect. Space such as Judy Brown (2003, p. 89) describes below opened up in the classroom.

### *Fire*

What makes a fire burn  
is space between the logs,  
a breathing space.  
Too much of a good thing,

too many logs  
packed in too tight  
can douse the flames  
almost as surely  
as a pail of water would.

So building fires  
requires attention  
to the spaces in between,  
as much as to the wood.

When we are able to build  
open spaces  
in the same way  
we have learned  
to pile on the logs,  
then we can come to see how  
it is fuel, and absence of the fuel  
together, that make fire possible.

We only need to lay a log  
lightly from time to time.  
A fire  
grows  
simply because the space is there,  
with openings  
in which the flame  
that knows just how it wants to burn  
can find its way.

### III. CONCENTRATION

Taking time to rest, to stop, to dwell on questions, ideas, methods and personal experience, creates a different classroom culture from what these students are accustomed to. It is new and challenging. Often it lacks the immediate payoffs students are looking for. It is not using time to get to one more problem or to finish everything and tie it up with a neat ribbon. It means going slowly enough to see there is more to what they are working on, slowly enough to be aware of what they are doing and with whom, slowly enough to truly look in the way John Moffitt (2003, p.125) describes below.

#### *To Look at Any Thing*

To look at any thing,  
If you would know that thing,  
You must look at it long:  
To look at this green and say,  
“I have seen spring in these  
Woods,” will not do—you must  
Be the thing you see:  
You must be the dark snakes of  
Stems and ferny plumes of leaves,  
You must enter in  
To the small silences between  
The leaves,  
You must take your time  
And touch the very peace  
They issue from.

Reacting to the ills of fast foods, a slow food movement is promoting the old fashioned practice of home cooked meals with healthful ingredients. Eating mindfully aids the digestive process and deepens one's appreciation of a healthful meal. Just as nourishment has been squeezed out of fast food, personal meaning is being squeezed out of education when the goal is to master information and methods that will be tested on year end state evaluations. This education, geared to covering material, promotes finishing units in order to go on to the next ones. The learning engendered might aptly be termed “fast learning.”

What the slow food movement and mindful eating bring to nutrition, the contemplative education movement brings to learning. Contemplative or “slow” learning is old fashioned learning. It's the learning of medieval church schools and the monastery, characterized by “dwelling with” rather than studying and moving on. In this form of education learners may read a single passage several times, sit with it in silence, respond to it in a journal, and share their responses to it out of the silence in pairs or as a class (see chapter 6 in Parker Palmer's *A Hidden Wholeness*). Slow learning unites the learner and the learned just as

eating meditation unites the diner and her food.

Just as slow foods have ingredients with high nutritional value, slow learning lends itself to particular kinds of textured experiences like reading poetry; conducting investigations; addressing paradoxical, controversial and ambiguous material; and resolving challenging questions and problems. These kinds of experiences naturally generate slow learning. How important it is to nurture habits of slow learning in students in too much of a hurry to get on to what is next. Concerning recording in her journal her contemplations on a challenging math problem a student wrote:

Writing what I'm thinking about gave me a second to look from a new angle at the problem which helped me figure out how to do my proof.

Ultimately, the habit of approaching learning (and then life) in a deeply mindful way is the most important fruit of slow learning. Teachers are using mindfulness activities in early childhood education, graduate education and everywhere in between. Starting classes with practices such as meditation, yoga and journaling can help students focus and approach the activities that follow with more awareness. However, a significant part of student learning takes place at home, where old habits prevail.

For the last few years I've had an understanding with my students that I expect them to work up to 45 minutes each night: to study the new material and solve as many problems as they can in that time. As I see it, both a 45-minute homework session and a 45-minute period of meditation should invite the participant to be fully present to the matter at hand. Two years ago, to try to make this point, I gave my students Thich Nhat Hanh's story about the practice of washing dishes to wash the dishes (see Nhat Hanh, 1975, p.4). Many

students understood the story at the intellectual level at best, however. Last year we devoted our short first class to a very concrete activity, raisin-eating meditation. I instructed the students to take 5 minutes to eat three raisins with full awareness of their taste and texture, putting one in the mouth only when no trace of the previous one remained. If they weren't able to eat all three in the time allotted, that was fine. The next day I explained that I wanted the students to do their homework with the same concentration they had given to eating the raisins. "Chew each homework problem thoroughly. Digest it fully before going on to the next one. In that way you'll receive the full nourishment that the problem has to offer you. Even if you don't have time to do every problem, you'll find that you will come away with a better understanding of the material than if you work hurriedly in order to complete it."

I find it possible to encourage slow learning in this manner because in mathematics there is no set number of problems that must be completed to insure a student has learned a new concept or mastered a new skill. In an English course it would make little sense to tell students that they could stop after carefully reading three-quarters of the assigned pages or in a foreign language course to stop after thoroughly learning two-thirds of the vocabulary words. Encouraging students to do their homework more mindfully in most subjects is feasible only if teachers are able to assign less reading, fewer vocabulary words, fewer questions to answer. If you try this, I believe that you'll find that less is indeed more.

After his first three weeks of class last year, one student reflected on what he wanted to improve:

I often do it (homework) to get it done. Rather than think about the problems that I am doing, I rattle off answers so I can move on to

other homework, which negatively impacts my ability to actually learn the material.

Another student, having completed Math II the previous year, wrote:

Now I study more and am more disciplined, mostly because of the dishes (dishwashing) passage, so I don't consider studying a chore, I try to enjoy it.

#### IV. CURIOSITY

My students are so conditioned by a culture that constantly judges and evaluates their answers that they want to ask only good, expert questions. How many of these students had any difficulty asking questions when they were five years old? The process of drawing out the inner intelligence of these students involves helping them get back in touch with their beginner's mind, described below by Japanese Zen master Shunryu Suzuki (1973, p.21):

In Japan we have the phrase *soshin*, which means "beginner's mind." ... Our "original mind" includes everything with itself. It is always rich and sufficient within itself.... This does not mean a closed mind, but actually an empty mind and a ready mind. If your mind is empty, it is always ready for anything; it is open to everything. In the beginner's mind there are many possibilities; in the expert's mind there are few.

When the class began reading the first complex material in the textbook, I asked them not to look at the problems but to write four questions of their own, three of which they could answer from their reading of the text and one they couldn't. I copied

their questions and asked each student to pick the one or two they found most interesting and write them in their journals, describing the qualities that made these particular questions of special interest. One student, because of his interest in space, chose a question about extending a concept from two to three dimensions. Another picked a question because she "had no idea how to go about answering it." Others selected a question because it was "slyly subversive to the book and math," or was "shrouded in mystery," or "because it made me smile."

I began this class on questions by giving the students the following words of the poet Rainer Maria Rilke (2001, p.34):

Have patience with everything unresolved in your heart and try to love *the questions themselves* as if they were locked rooms or books written in a very foreign language. Don't search for answers now, because you would not be able to live them. And the point is to live everything. *Live* the questions now. Perhaps then, someday far in the future, you will gradually, without even noticing it, live your way into the answer.

I then asked students to respond to this passage in their journals. The students' responses to Rilke were in the back section of their journals, which I never read. I did wonder if many were sympathetic. These students will work hard to find answers, but if they're unable to find them or learn them from someone else, many will let the questions go and move on. Yet living with questions was precisely the approach that enabled Newton and many other great thinkers to come upon their most significant insights. Thus, one of my goals for the year was to ask students to consider questions large enough to require living with, questions that I give them and questions

they raise themselves.

I wasn't very successful in my attempts to promote student questioning. The students weren't used to formulating questions, and many felt awkward about sharing them. Returning to Rilke's quotation, I realized that my goals for the students were that they develop their curiosity and value uncertainty and puzzlement. These qualities could be nurtured in a private way. To that end I began to ask students to write about their uncertainties in the backs of their journals every few weeks. The students saw this as helping them become more aware of their uncertainties, giving them space to think about them and perhaps raise questions in class. Not surprisingly, some students find themselves uncertain as to what their uncertainties are.

## V. DILIGENCE

When I present mindfulness workshops to teachers and high school students, I begin by suggesting that our minds play a significant role in our wellbeing. I then lead an experience to give people an understanding of how this may be. When I talk about mind, I am talking about *awareness*. It helps people to think of their awareness as a "stage." On that stage a succession of things appear: thoughts, feelings, perceptions, physical sensations. I tell the group that we will conduct a short experiment so that we can watch what is playing on our personal stages. After the students or teachers get comfortable in their seats, I ask them to close their eyes and tune in to whatever may be on their stages of awareness. I ask them simply to try to watch whatever thoughts, feelings, perceptions and sensations arise during the next few minutes, observing them, but not getting carried away by them.

After five minutes we slowly open our eyes. Then I ask a series of questions. How many were aware of physical sensations—

sounds, smells, tastes, contact with the seat, their heartbeat, their breathing, their feet, etc.? How many were aware of their emotions or thoughts? How many saw a thought arise? A thought end? Regarding feelings, I ask how many people experienced negative, neutral, or positive feelings? Of the negative feelings, how many had to do with things that have already happened, things they're feeling upset or guilty about? Usually quite a few relate to this question. I then ask how many negative thoughts and feelings had to do with the future, things they are anxious about? This also gets a good response. Finally, I ask how many negative thoughts and feelings had to do with the present?

Ultimately, I point out that what our minds do during this particular five-minute interval of our waking life is repeated about 70,000 times each year. If we multiply the number of negative thoughts and feelings we observed by 70,000, we might understand why the mind plays such a significant role in creating stress. However, if we are able to become more aware of the negative thoughts and feelings that enter our minds and develop ways to replace them with positive ones, we will be able to live happier, less stressful lives—in school and beyond. And meditation is one way to help our minds turn more readily to healthy thoughts.

Our students have very full schedules. They do their math quickly, at best mastering the material and using it to solve problems successfully, but rarely aware of their relationship to the work. Could students become more mindful of their thinking? I thought they could if I gave them time specifically dedicated to doing so. Thus, for the last two years my students have done five minutes of free writing every Friday. My instructions are, "Spend the next five minutes writing down whatever comes into your awareness. Do not stop writing. Should you find nothing in your mind, write 'My mind is blank' over and over until something

shows up.” I never read this writing. It is only for the students. Many take to it from the start. Others report being initially put off by the randomness of their minds but over time find their thinking becoming more coherent. The exercise of writing takes on real value. On the rare occasions I forget it is writing day, the students are quick to remind me. This writing supports the students’ work on mathematics. One student, confirming my colleague’s previously mentioned observation, commented:

Writing down my thoughts and emotions, giving myself time to purely focus on whatever was going on in my mind, allowed me to focus for the next 40 minutes on math more easily.

Doing free writing and responding to others’ writing several times a week seemed to get most students into the habit of paying better attention to themselves and to life. Recording thoughts and feelings increased the students’ awareness of them. Some found responding to readings especially rewarding. One commented that it “made me examine my life.” Others preferred free writing. A few weeks into the course there was a request for a wider variety of readings. The internet provided quotations ranging from topics like problem solving to the wisdom of Yogi Berra.

Although I never read the back of the journal entries, at the end of the year I asked the students to read all their own back-of-the-journal entries and asked each student to write a paper describing one of these entries and why it was meaningful. A number picked free writing entries written early in the year and commented on how much their attitudes about the course or their understanding of mathematics had changed. One wrote:

What I have learned is that dealing with adversity and solving difficult

problems is as much about the way you think about thinking about the problem as it is the problem itself. If you allow yourself to forget about the intimidation, to forget about your preconceived notions about what you are doing; if you get into a focused, creative mindset, and immerse yourself in the situation then and only then can you reach your full potential.

Some picked readings that led them to a new or deeper understanding about themselves or life. One student commented on her earlier response to a commencement address by Steve Jobs:

I began to think that maybe it was not so bad to be clueless (about life direction); I am not as restricted by my own thoughts, and on the contrary, am quite free to explore and try to find something that I really do love.

It seems to me especially wonderful when mindfulness practices arise organically in response to the needs of students. The following is a story about one way in which this happened.

Ten years ago my afternoon 9<sup>th</sup> grade algebra class was giving me fits. They took forever to settle down. This class regularly got half the work done during class that my morning class accomplished. My first impulse was to blame the class’ problems on a small group of immature students. However, a friend suggested that I survey the class to learn how they viewed things. One observation shared by a number of students was that students were often tired because the class was right after lunch. Reporting back this “finding” to the class, I told them that I’d do some research over our winter break and see if I could come up with a remedy.

Bahnte Rahula, one of the monks at the

Buddhist monastery where I spent part of my winter break, taught yoga. I shared my school challenge with him and asked his advice. Bhante showed me an easy stretching exercise that brought chi energy up from the feet. "Standing on your toes with your hands up over your head, breathe out as you bend down and touch the floor. Then breathe in as you slowly raise your hands back up over your head. Repeat this exercise nine more times, remaining on your toes throughout."

I returned to my challenging class with the hoped for remedy for the problem of tiredness. Gathering the class in a circle in the front of the room, I led the students in the stretching exercise. All were aware of its effect. "In the future," I said, "we'll start each class this way. I'll ask you all to take turns leading it. If you're wide awake and ready for class, participation will be optional."

For the rest of the year almost all of us participated in the daily exercise. People passing our door would peer in the window at us with a look of surprise. Our opening practice became something of an identity for the members of the class. Best of all, class members became more focused on their work and more attentive to me and to each other. Ever since then, I introduce this yoga practice to a class the first time students seem tired and then make yoga an option that students may request anytime they come to class tired.

## VI. EQUANIMITY

Quizzes, tests and exams are major sources of stress for many students. Some come to class already so stressed out that their ability to show what they know is compromised. My setting aside five minutes for meditation before the start of quizzes, tests and exams has proven to be very beneficial for many of my high school math students. I start this practice before the first

quiz by asking the class if anyone feels nervous. When hands go up, I tell the class that we'll do a short meditation aimed at reducing stress.

The meditation is in two parts. We turn out the lights, and I ask the students to sit, eyes closed with their bodies erect but relaxed. In the first part of the meditation, the students turn their attention to their feelings, noticing any nervousness, excitement, worry, etc., and simply letting it be there. Experiencing these emotions is natural. While some emotions aren't helpful, there is nothing intrinsically wrong with them. Learning to accept these emotions as natural parts of ourselves, helps us avoid magnifying their effects on us.

On the other hand, there is more to the students' experience of mathematics than this quiz and these feelings. So, I next instruct the students to change their focus and tune into a time when they had a very positive experience with math. This may be a recent course, project, or activity or, perhaps, a memory of learning to count or tell time. Sitting with feelings of accomplishment for a couple of minutes readies the students to begin the quiz with a positive mindset. I further suggest that if students find themselves getting nervous as they work, they stop, close their eyes and slowly breathe in and out three times, getting back in touch with positive experiences.

We all have anxiety and tension awaiting situations we may not be fully prepared for. Learning to be aware of such feelings and accepting them as natural already begins to create interior space. This is a significant life skill for students to learn. However, it is also important for students to know they are much more than these particular feelings. This awareness makes it possible for students to make the choice to focus on other experiences which evoke feelings of competence and readiness. After her first quiz this year, a student wrote in her journal:

Yesterday we were given a pop quiz, but we meditated beforehand. I barely had time to worry because the atmosphere was one of calmness and peace. A little silence went such a long way.

Because they had another teacher as their exam proctor, students in one of my courses had no time to meditate before taking their midyear exam last year. I visited them during a break from my proctoring assignment and handed them cards reminding them to “stop and breathe.” Many students found these reminders helpful. Before the final exam the students asked me to distribute the “breathe cards” again. One student even reported:

I like to take a moment to meditate before tests and quizzes in other subjects to calm myself down and focus on the positive.

Here is an end of the year observation from a 10th grade student:

During the course of this year the meditations at the beginning of class and before tests and quizzes have really taught me to relax. At the beginning of the year I would get nervous before tests and quizzes because I would quickly try to review everything we needed to know, but for the second half of the year, I learned to clear my head. More importantly, I learned to breathe! I learned how to clear my mind and trust that I would remember all of the theorems and formulas. When I was able to clear my head and relax, I made fewer and fewer mistakes.

As this quote suggests, meditation, once tried out by the students, was not mandatory. I asked students to put away

notes and books and silently use the several minutes before the quiz or test as they best saw fit, meditating or thinking about the math they had learned or about anything else. Most, like this student, ended up finding that meditation was their best option.

However, the degree to which meditation helped varied. I explain to students that the mind is like a television set. It has many channels, including, for example, the happiness, the boredom, the confidence, and the anxiety channels. Each person has the same channels, but some channels have better reception than others. The strongest one are default channels, ones that tune in automatically a lot of the time.

Some students approach tests feeling ready and confident. Meditation helps even these. A strong math student explained:

I have put myself in the mindset of discovery before my quizzes and tests and have faith in my ability to divine answers to questions not seen before within limited periods of time.

Others, with similar understanding and preparation, invariably find themselves nervous. Although some of the students in the former group might benefit from a meditation to help them focus, a meditation on positive math experiences would be more relevant to those in the latter group to help them get over their anxiety. Still, some with strong anxiety channels will revert to their anxiety default mode as soon as they encounter difficulties. I suggest to these students to stop working, close their eyes and breathe a few times, then change their mental channel back to a positive one. Repeatedly tuning to positive channels strengthens their signal so that eventually they may become default channels. In an environment where stress is often debilitating, it's encouraging to have a student say:

At first I was doubtful that it (meditation) would help, but it turns out that it focused me and calmed me down more than anything.

Early last year I had a conversation with a student who wrote in her journal about the stress she'd experienced in preparing for the first test. She related how thinking about the test had a negative effect on her studying. I wondered whether she was disturbed by thoughts about outcomes in all her activities. She replied that thoughts about how a scarf would turn out never intruded on her knitting. I suggested that she experience studying for tests as another form of knitting, trusting that the "scarf" would turn out fine if she gave herself fully to her "knitting."

## CONCLUSION

I have seen that providing students a variety of opportunities to be mindful on a regular basis (doing yoga, meditating or journaling on readings, math problems, their own thoughts and emotions, prior math experiences, the taste and texture of a raisin) enables students to experience a form of education that enhances the seven factors of enlightenment in each of them. In the end, students always make their own meaning out of their experiences of mindfulness. One wrote that, in responding to readings, she would often "stray away from it (the reading) to my own thoughts." Another went further:

I have learned great things from myself in the way that I respond to quotes in my journal and in how I respond to myself in free writing. In writing continuously, I often write things that I did not understand consciously before they hit the paper.

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