

# Case Study 12A

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## Learning to BREATHE

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### **BACKGROUND ON THE LEARNING TO BREATHE PROGRAM**

Implementation issues are important elements to consider, particularly when fostering what is being called *contemplative education*. In particular, mindfulness-based approaches call for the widening of perspective beyond the typical “doing mode” of mind to include a focus on the inner experience of teachers, of students, and of their interrelationship in classrooms. This “being mode” does not supplant planning, organizing, evaluating, analyzing, or any of the other behaviors of mind that are foundational to education but rather enhances these skills through ongoing awareness of and nonjudgmental attention to all domains of present-moment experience. As such, *mindfulness as practice* intrinsically requires qualities of openness, presence, and flexibility in teaching that might be somewhat unfamiliar and that pose challenges to description and measurement. Mindfulness programs can provide an overarching structure and thoughtful guidance to teachers who wish to introduce contemplative skills to students while supporting the practice of flexible and interested attending to inner and outer experience. Such programs might be considered a relatively formal offering embedded within a range of mindful practices and structures to enhance learning and wholesome emotional qualities.

Learning to BREATHE (L2B; Broderick, 2010) is a mindfulness curriculum for adolescents designed to support emotion regulation, stress management, and executive functioning in classrooms and other settings. Mindfulness, as used here, refers to the cultivation of a certain kind of attention: purposeful, present focused, and free of perceptual biases and judgments about one’s experience (Kabat-Zinn, 1994). Mindfulness practice reduces the tendency to operate on “automatic pilot” and helps clarify and modify the reactive mental habits (e.g., dysfunctional thought patterns) that contribute to stress burden. For a detailed description of mindfulness practices, see work by Lutz, Dunne, and Davidson (2007) referenced in chapter 12. In L2B, specific mindfulness practices include learning to become aware of one’s breath,

body sensations, thoughts, and emotions, as well as intentional practice in cultivating positive qualities such as kindness and gratefulness. Six themes are built around the BREATHE acronym: (*B* for *Body*) body awareness; (*R* for *Reflections*) understanding and working with thoughts; (*E* for *Emotions*) understanding and working with feelings; (*A* for *Attention*) integrating awareness of thoughts, feelings, and bodily sensations; (*T* for "*Tenderness/ Take it as it is*") reducing harmful self-judgments; (*H* for *Healthy Habits of Mind*) cultivating positive emotions and integrating mindfulness into daily life. The overall goal of the program is to cultivate emotional balance and inner empowerment (*E*) through the practice of mindfulness, an advantage referred to as gaining the "inner edge."

Given the demands of a school, L2B may be adapted for various student groups and may be presented in six, twelve, or eighteen sessions. The program has been adapted for younger students with shorter sessions and developmentally appropriate content and activities. Each lesson includes a short introduction of the topic, several activities for group participation and discussion to engage students in the lesson, and an opportunity for in-class mindfulness practice. Workbooks and CDs for home practice are provided to students as part of this program.

L2B program development began in 2003 when the author began teaching several mindfulness classes each semester for ninth- through twelfth-grade students in an academically rigorous private school for girls in Pennsylvania. The original intention was to offer Mindfulness Based Stress Reduction (MBSR; Kabat-Zinn, 1990) for adolescents, with minor adaptations. Over the first three years of implementation, students came to the program primarily through referrals from teachers and parents. The sessions were held in a variety of settings including classrooms, offices, and auditorium spaces and occurred during lunch, study halls, or special classes. Over time, it became clear that adjustments were needed in the curriculum and the delivery system, and each year's iterations brought changes informed by earlier experiences. The system of "pulling out" students from other activities was less than ideal, as was the tendency for students to be referred by adults. It was important to simplify the program and provide sufficient time for students to experience another way of knowing and being while making it more appropriate for adolescents in schools. Similarly, calling the program "stress reduction" put off some students who were uncomfortable with being identified as less able to cope. Despite these difficulties, students confirmed the benefit of the class. As time passed, the need to situate the program within regular classroom instruction as universal prevention became increasingly clear. Thus, program objectives were explicitly linked to standards for health, counseling, and other professional areas so that it could be easily incorporated into existing curricula and assessment plans. A pilot trial was carried out for all seniors within their health curriculum. Results indicated reductions in negative mood and physical complaints and increases in emotion regulation skills (Broderick & Metz, 2009).

Since its beginning in 2003, L2B has been implemented in a variety of settings including private (residential and nonresidential) schools, public schools, clinical settings, and after-school programs. In addition to answering questions about program efficacy, research and case studies can help us better understand how such programs enter and adapt to the systems in which implementation occurs. The following sections of this case study provide a rich description of two implementations. The first of these by Laura Pinger, MS, senior outreach specialist at the Center for Investigating Healthy Minds (CIHM) at the Waisman Center of the University of Wisconsin–Madison, describes a large wellness-training project for teachers and students. The second by Doug Worthen, teacher and coach at Middlesex School in Concord, Massachusetts, describes an implementation in an independent, academically rigorous residential school.

### **MADISON, WISCONSIN, PUBLIC SCHOOLS (LAURA PINGER)**

In this project, Drs. Richard Davidson and Lisa Flook from the CIHM collaborated with the Madison Metropolitan School District (MMSD). MMSD enrolls approximately twenty-four thousand students of which 53 percent are minorities, 49 percent are low income, 15 percent are students with special education needs, and 17 percent are English language learners. The study assessed the impact of wellness-training programs for staff and students that were designed to increase attention, awareness, and stress management. MMSD administrators were particularly interested in these outcomes as one way to enhance teaching and learning. The ability to move forward with a research–school system collaboration was greatly enhanced by the integrity of the CIHM researchers as well as by the quality of the teachers they employed. Both Laura Pinger and Katherine Bonus, manager of the UW Health Integrative Medicine Center for Mindfulness, have extensive experience teaching in Madison schools and teaching Mindfulness Based Stress Reduction (Kabat-Zinn, 1990). This combination gave MMSD administrators greater confidence to explore participation in the UW–Madison Wellness Study. Initial meetings resulted in a group of MMSD administrators and staff attending the October 8–9, 2009, Mind and Life Institute’s Educating World Citizens for the 21st Century, where educators, scientists, and contemplatives dialogued on cultivating a healthy mind, body, and heart, which cemented their commitment to moving ahead with the research project.

This quasi-experimental trial, now under way, is being conducted across a two-year period (2010–2012), with elementary teachers and fifth-grade students from four classrooms as the target participants. Students were drawn from two Madison elementary schools with 68 to 71 percent poverty and wide ethnic and educational diversity (1 percent Native American; 25 to 30 percent Caucasian; 25 to 33 percent African American; 32 to 38 percent Hispanic; 4 to 11 percent Asian; 32 to 45 percent English language learners). During the first phase (fall/winter 2010), a group of fifth-grade teachers and key support staff

at the receiving middle schools (e.g., social workers, school nurses, positive behavior coaches, and school psychologists) received a Modified Mindfulness-Based Stress Reduction (MMBSR) program taught by Bonus and Pinger. The staff training took place over a period of ten weeks, with a two-hour session each week and a seven-hour "Day of Mindfulness" after the seventh session. Teachers were also offered monthly follow-up sessions during the student training phase to help reinforce their learning while incorporating mindfulness practices into their classrooms.

Teacher recruitment provided the first challenge to the study. An extensive time commitment was required given that one aim of the study was to assess the feasibility of training teachers to teach L2B to their students during the course of the regular school day. Because clinical observations consistently indicate that teachers' personal engagement with mindfulness practice offers an effective way of facilitating it in others (Crane, Kuyken, Hastings, Rothwell, & Williams, 2010), it was considered essential that teachers experience mindfulness personally in their lives and their work. Fifth-grade teachers participated in twenty-seven hours of MMBSR training, observed the MBSR teacher model twenty half-hour L2B lessons with the fifth-grade students, completed two hours of supervised teaching, and attended three two-hour support/follow-up sessions. Teachers were also asked to complete personal mindfulness practice logs during their ten-week training, provide written feedback to the mindfulness teacher following each student lesson, and complete weekly classroom logs of practice done with students. Finally, fifth-grade teachers received formal feedback from the mindfulness teacher after the three thirty-to forty-five-minute mindfulness lessons they taught in their own classrooms. Participating teachers were found to demonstrate a solid commitment and follow-through on all aspects of the study with no attrition.

Teachers' evaluations of the MMBSR course reflected increased skills in coping with many aspects of their lives, including family and work relationships. One teacher commented that "in class and outside of it, having the tools to be mindful of what's happening in the moment and . . . meet those moments, rather than be swept along by them, has been powerful." An example of what was most helpful to them in the classroom was "dropping in and seeing what is really going on [and] having a choice in how I can respond."

In the winter and spring of 2011, the focus shifted to student wellness (implementing L2B) and providing teachers the opportunity to observe and teach lessons to their fifth-grade students. In the second year of the study, current fifth-grade students will be tracked as they transition into sixth grade and followed through their first semester of sixth grade. Teacher and student wait-list control groups will receive the wellness programs at that time. The young adolescent version of L2B with modifications by CIHM was taught by Pinger in fifth-grade classrooms. Twice-weekly thirty-minute student lessons were offered for ten weeks.

Teacher assessments included classroom observations, computerized tasks of attention and emotion regulation, behavioral measures of cooperation,

and self-reports of stress and well-being. Teachers were asked to document their personal mindfulness practice time as well as in-class practice with students. Access to teacher work records and medical records signifying health status were requested, and saliva samples were collected pre- and postintervention (three times per day for three consecutive days at each time point) to examine a hormone associated with stress.

Student assessments include computerized tasks of attention and emotion regulation; behavioral tasks of cooperation; self-reports of emotion understanding; problem solving; and school affiliation, sociometric ratings, grades, standardized test scores, absence records, and visits to the school nurse. Teacher reports of students' prosocial behavior will also be collected. Students will again be assessed during their sixth-grade academic year to observe the effects of training over time.

Several supports assisted teachers' transition from *learning* and *practicing* mindfulness to *teaching* mindfulness to students: (1) written lesson-by-lesson feedback to the mindfulness teacher; (2) observation and feedback to the classroom teacher after teaching each of three mindfulness lessons to students (during weeks 6, 7, and 8 of the ten-week student program); and (3) three opportunities to meet with the other fifth-grade teachers in the study to share experiences. The teacher feedback form incorporated domains of competence drawn from the Mindfulness-Based Interventions Teacher Rating Scale (Crane et al., 2010), which included coverage and pacing of lessons, relational skills, skills in guiding mindfulness practices, embodiment of mindfulness, and management of group processes. In addition, teachers completed the following open-ended statements as part of each feedback form:

1. One thing I felt went well in class was . . .
2. One thing I felt did not go well in class was . . .
3. If I could have a redo for class, I would . . .
4. One question and/or comment I have about the lesson is . . .

Classroom teachers provided the mindfulness teacher with feedback, thus allowing teachers to observe, learn, and develop a beginning understanding of the mindfulness domains of competence embodied by a mindfulness teacher and to receive feedback regarding their own embodiment of these qualities. Teacher questions ranged from "How do we help kids get beyond the giggling stage?" to "I'm wondering how to help kids explore unkind thoughts." The mindfulness teacher responded to questions by e-mail, and all questions were open for discussion at the monthly follow-up sessions.

The bidirectional feedback process was extraordinarily helpful in two regards. Classroom teacher feedback to the mindfulness teacher provided information that impacted future lessons. For example one teacher wrote,

Powerful stuff! I am concerned about a boy—he struggles to "manage" his thoughts, judging the thoughts and feelings as "good" or "bad" inside him. He tends to be hard on himself. Another student bangs his head because he doesn't

want the thoughts that keep flooding his mind. He is always afraid of “messing up.” How do I provide support for all that is happening?

This feedback allowed the mindfulness teacher to gain insight into what was happening in class when she wasn't there. As a result, the next lesson shifted to focus on nonjudgment and kindness practice toward self and others for all that arises.

The feedback given to fifth-grade teachers by the mindfulness teacher was also helpful. One classroom teacher struggled with knowing how to respond when students were giggling and fidgety during a longer mindfulness practice that she introduced. Feedback from the mindfulness teacher included suggestions about how to “check in” with students' experience as it was unfolding. As a result of the feedback and invitation to ask further questions, the classroom teacher shared her discomfort regarding working with students' emotions but also the recognition that her students' learning could be enhanced if she became more skillful in this area. She was receptive to the fact that teaching awareness of emotions is new learning for her and her students and that first attempts would rarely be 100 percent skillful. This interaction also provided the opportunity for the teacher to offer caring practice toward herself and students when a lesson, either about mindfulness or another subject area, did not go exactly as planned.

A further challenge in the study was adapting activities and practices so that they were responsive to the age and developmental needs of students. Just as academic lessons are routinely modified for students with special learning needs (autism, learning disabilities, emotional disabilities, ADHD, etc.), mindfulness lessons also required adaptations for specific students. Such adaptations included preteaching of concepts, use of visuals (pictures and hands-on materials), and routinely incorporating movement. For younger students, for example, a variety of mini-mindfulness movement practices could be used to start the sessions and settle the class. For these fifth-grade students, teaching about different emotions with the visual aid of emotion faces was helpful in advance of mindfulness-of-feelings practice.

Demonstrating flexibility, clarity, and genuine responsiveness when challenges arose within lessons was essential. For example, during the fifth week of the program, the unexpected occurred. Students had previously been asked to make a list of ten stressors they were experiencing. A piece of masking tape was placed on the floor dividing the classroom in half, and everyone was asked to stand on one side of the masking-tape line and to “cross over the line” if they had ever experienced one of the stresses from the combined anonymous student-generated list. Some examples from the class included family members fighting/yelling at each other, illness or death of family members or pets, incarceration of relatives, difficulty with schoolwork or homework, going to middle school, not being able to fall asleep, pain, headaches, stomachaches, and worries about loved ones who were experiencing stress.

Following the “cross the line” activity, students were asked what physical or emotional problems could result from chronic stress. Asking the question was like opening the floodgates. Students began to share comments such as, “Some people die (commit suicide),” or “Sometimes I feel like the Greek myth guy [Atlas] holding up the heavy, heavy weight of the world and not knowing if I could keep it all up.” Another student talked about nightmares and being comforted by a live-in grandmother in the middle of the night. There wasn’t enough time during the lesson to listen to all of the stressors and how they affected these young students. The next lesson was devoted to mindfulness practice and a discussion of what to do in times of stress. The mindfulness teacher reviewed whom to talk with at school and at home when stress begins; how to remember to send caring practice to oneself or someone else who is stressed; how to notice sensations, thoughts, and emotions when stressed and let them pass as one brings attention back to sensations of breath over and over again. Students were amazingly open and honest when sharing personal stressors and ways they were learning to work with them.

It was especially rewarding to behold the creativity, presence, and responsiveness demonstrated by the fifth-grade teachers as they began teaching mindfulness lessons to their students. One teacher encouraged students to brainstorm activities and practices learned during the first eight weeks of the L2B curriculum. Using that information, students were asked to “create a mindfulness map,” being sure to include answers to three questions: Why would anyone want to learn mindfulness? What is mindfulness? How does one do mindfulness? Student understanding and creativity was evident in one student’s map of “Stress Island” on which a live volcano sputtered. The island was surrounded by mindfulness practices that worked with and explored the stress: notice sensations, notice thoughts, notice emotions, breathe, and be kind.

The preliminary observation of the mindfulness teacher was that students were surprisingly receptive to and able to remember and employ these new practices to work with the challenges and joys the curriculum offers. Individual student changes included less impulsivity; increased ability to recognize, talk about, and be less judgmental about sensations, thoughts, and emotions; recognition of the universality and impermanence of stressors; and willingness to engage in mindfulness practices. For example, some students decreased their tendency to call out answers before raising their hands. Another student stated that she “learned to take it as it is.” When asked to explain what she meant, she stated, “Like when my mom says she has a headache and won’t take me to the mall, that’s just the way it is. I don’t get more mad and stay mad because that doesn’t help.” A second student shared, “[You do mindfulness] so you can have a better life and so you can be kind and healthy.” Another student offered a grasp of technique: “You can use mindfulness any way you want, but here is how you do it. You can sit in a chair and focus on your breath. You have to have your back straight and your hands in your lap or you can

do it by just listening to your teacher or whoever is talking to you. If you get distracted, bring yourself back to listen.”

At the time of this writing, outcome data have not yet been collected or analyzed, but this rich source of information holds promise for teachers in guiding future efforts to bring contemplative approaches to schools.

#### **MIDDLESEX SCHOOL, CONCORD, MASSACHUSETTS (DOUG WORTHEN)**

Middlesex School is a private, coeducational, residential, and day school located in Concord, Massachusetts. The school serves 375 students in grades nine through twelve, and the 250 residential students currently represent thirty-two states and sixteen foreign countries. Middlesex is a well-regarded preparatory school and offers a program of studies and a community experience that is rich, diverse, and challenging. Although the level of education is rigorous, the school community offers high levels of support and is committed to the growth and well-being of each student.

At least once a week the school gathers in the chapel or in assembly to hear speakers present on a wide variety of topics from poetry to politics. In the fall of 2009, Dan Scheibe, the assistant head of school, invited Doug Worthen and a friend, both Middlesex alumni, to speak about the impact of mindfulness on their lives. Worthen’s experience with mindfulness practice began in 1999 as an anxious student-athlete at the University of Virginia. After reading Jon Kabat-Zinn’s (1994) book, *Wherever You Go, There You Are*, he realized the importance of mindfulness for himself and for adolescents in general. Mindfulness has been helpful in many aspects of his life, including athletics, business, personal relationships, coaching, and through two bouts with lymphoma. He has completed the Mindfulness Based Stress Reduction teacher training, staffed several teen mindfulness retreats, and led mindfulness workshops at nearby schools.

The presentation resonated with the students and sparked their interest in mindfulness. With Dan Scheibe’s encouragement, Worthen introduced an optional mindfulness course to students on Sundays during the second semester of 2010. Despite needing to meet on their only free day for a noncredit course, fourteen students signed up. When asked why they came, many responded that they were looking for a way to “handle stress,” “become less anxious,” and “deal with racing thoughts.” Interest in the mindfulness course has grown at the school as more students experience the benefits of the practice. By graduation of 2011, over one-third of the senior class will have taken the optional mindfulness course.

Mindfulness training is also offered to the faculty in the form of a faculty retreat at the end of the school year. A presentation about mindfulness and the research supporting it was given at a faculty meeting by one of the authors (PB) in early 2011. Faculty became interested and engaged, so the mindfulness teacher (DW) now offers a weekly faculty mindfulness group. The support of key individuals such as Kathy Giles, the head of school, and the assistant head of school is central to implementation success. Based on anecdotal informa-

tion from program participants, administrators recognized the benefits of mindfulness for learning, health, and well-being and have been very receptive to learning about the science that supports the practice.

The main hurdle to bringing mindfulness to Middlesex is finding space in a very busy and demanding academic schedule. The initial attempt to bring mindfulness to students and faculty was modest, and with each iteration, attempts to expand offerings take shape. Teachers and administration are discussing ways of introducing the course in a more systematic and comprehensive fashion for students. Similar to most school situations, some difficult decisions will need to be made with regard to where to house this new offering within the curriculum. As with the Wisconsin project, adaptations need to be made to adjust to the needs of the school.

L2B has provided a clear, straightforward, and age-appropriate curriculum with effective exercises and a practical layout that works for Middlesex. Although this implementation is not part of a large research project, ongoing evaluation using the Adolescent Stress Questionnaire (Byrne, Davenport, & Mazanov, 2007) has shown that 91 percent of students report decreases in stress after the program. Anecdotal feedback from faculty and parents also indicate that the course has had a significant positive impact on those who have attended. In particular, students reported learning that they have more control over their emotional reactivity than they thought. They also recognized that they were not unique in feeling stressed or anxious. One student wrote: "I learned that sometimes when I'm angry, my feelings are not reasonable and I need to put them in perspective. I also realized I have a 'crazy' mind, but that everyone else's mind is like that too. Now I can concentrate much better and be aware of my body and emotions."

Many students reported that the class helped them focus in academic and athletic situations. "I think it helped improve my academics greatly. I was more aware of the work I was doing in each class, and it helped me deal with classes I did not enjoy as much." Students reported practicing mindfulness informally in class and in conversations with others as a way to engage and remain alert. One indicated that he used mindfulness "always. Whenever I remember to be present, I close my eyes and take a deep breath, realizing how incredible life is." Finally, when asked to whom they would recommend the course, they universally felt that everyone could benefit from greater awareness. In the words of one student, the question "Who could benefit?" was answered this way: "Anyone with a neocortex."

In conclusion, these case examples describe the challenges and rewards of bringing mindfulness to preadolescents and adolescents. The desire for more vital and engaged education appears to be taking hold in the minds and hearts of teachers and researchers as they strive to integrate social and emotional learning into the daily life of schools. Contemplative educational innovations are flourishing as if in response to the question posed by Kabat-Zinn (2005, p. 608): "Might not it be time for us to capture the full spectrum of our inherent capabilities, to explore and grow into the fullness of what it might

mean to be human, while we still have the chance?" Just such an investment in the fullness and well-being of children and adolescents is worth the effort.

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