CONTEMPLATIVE PEDAGOGY

THE SPECIAL ROLE OF TEACHING AND LEARNING CENTERS

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We provide an overview of the definition, intention, and benefits from contemplative exercises, showing how these practices can build and sustain attention, deepen understanding of the material presented, support and increase connection and interrelatedness, and inspire inquiry and insight. Following that, we provide approaches to fostering these of sorts of practices through university teaching and learning centers. We also provide a cautionary note on possible problems with this approach. We hope that these descriptions will stimulate interest and inquiry into contemplative/introspective exercises and enable further investigation and discovery.

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In our courses, we try to teach our students to be independent thinkers. We endeavor to teach the whole person, with an intention to go beyond the mere transference of facts and theories. While concentrating on these holistic goals, we also want to challenge and develop students' analytical problem-solving skills, as well as provide careful explanations of

complicated material. We want to create the opportunity for our students to engage with material so that they recognize and apply its relevance to their own lives, deeply feeling and experiencing themselves within their education. In other words, while fostering their knowledge base and analytical abilities, we want to present material in a way that supports students in having their own agency so that the material is not simply a set of intellectual hoops for them to jump through but active opportunities for them to find meaning and personal and intellectual development.

This is no easy task. Focusing on our students' agency does not mean that our courses should or even could be equal collaborations. No matter what we do to create such an environment, we remain their leaders and teachers. We are the architects of the syllabi and make informed evaluations of their work. Negotiating this divide—wanting to engage with students rather than talk at them, while knowing that we remain their teachers—is an extremely difficult but worthwhile process. In traversing these two poles, we often err on the side of rigid structure. In much of formal education, we stress the abstract and conceptual; indeed, learning requires this powerful form of thinking. However, we have often stressed this form of learning to the exclusion of personal reflection and integration. It is understandable how this happens; developing careful discursive, analytical thought is certainly one of the hallmarks of a good education. However, creative, synthetic thinking requires more than this; it requires a sort of holistic engagement and attention that is especially fostered by students' finding themselves in the material. The one aspect of their learning for which students are sovereign is the awareness of their experience and their own thoughts and reactions to the material covered in the course.

This concentration on outcomes and narrow information handling has its costs. In her book *Mindfulness* (1989), Ellen Langer writes that perhaps one of the reasons that we become "mindless" is the form of our early education. "From kindergarten on," she writes, "the focus of schooling is usually goals rather than on the process by which they are achieved. This single-minded pursuit of one outcome or another, from tying shoelaces to getting into college, makes it difficult to have a mindful attitude toward life. Questions of 'Can I?' or 'What if I can't do it?' are likely to predominate, creating an anxious preoccupation with success or failure rather than on drawing on the child's natural, exuberant desire to explore" (pp. 33–34). Indeed, the history of educational reform is full of examples of the responses to the heavy costs of this sort of concentration.

These responses have formed a rich tradition of integrative and experiential education that has developed over time in many ways.

Researchers and educators have pursued the objective of creating learning environments that are rich and deeply focused on the relationship of the student to what she or he is learning, as well as the interrelatedness of personal relationships to the rest of the world. We have found that contemplative practices respond powerfully to these challenges. These practices can provide an environment that is inclusive of the increasing diversity of our students and a modality that is particularly effectively presented to campuses through teaching and learning centers (TLCs). While the specific structures of contemplative practices vary greatly, at the heart of them all is a sincere intent to integrate students' own rich experience into their learning. As B. Alan Wallace (2007) points out, *contemplation* is derived from the Greek word *theoria*. It refers to a "total devotion to revealing, clarifying and making manifest the nature of reality" (p. 1). By leading our students through introspective exercises, the reality they are revealing is their own internal experience of the material covered in our courses.

To be sure, others have thought about this more expansive approach to teaching. For example, the famous work of John Dewey and Jean Piaget and the radical reframing of education by Paolo Freire all have experiential components at the heart of their systems (Dewey, 1986; Freire, 1970; Piaget, 1973). In fact, whole educational systems have been built around experience. For example, the experiential learning theory system of Daniel Kolb posits two sets of related inquiries: concrete experience and abstract conceptualization, on the one hand, and reflective observation and active experimentation on the other. Indeed, the advocates of the integrative education movement, influenced by the systems of thinkers like Ken Wilbur and Sri Aurobindo, call for the active attention on combining domains of experience and knowing into learning (see, for example, Awbrey, 2006). Thus, our focus on contemplative and introspective practices is not unknown in academia; what distinguishes the experience and integration discussed here is that "experience" is focused on students' introspection and their cultivation of awareness of themselves and their relationship to others. The exercises are relatively simple and mainly conducted in their own minds, relating directly to their personal experience discovered through attention and awareness, yet these private investigations yield increased empathy with others and a deeper sense of connection around them (Birnie, Specia, & Carlson, 2010).

Formally legitimizing their experiences changes students' relationship to the material being covered. In much of formal education, students are actively dissuaded from finding themselves in what they are studying. All too often, students nervously ask whether they may use "I" in their

papers. A direct inquiry brought about through their introspection validates and deepens their understanding of both themselves and the material covered. In this way, students not only more richly understand the material, but they retain it more effectively since they have a personal context in which to frame it. There need not be direct, clumsy questions about how the material students are learning fits “into the real world” or is in some way relevant to their lives. The presentation of the material can be approached in a manner in which students can directly see its impact on their lives; they themselves discover the fit. This builds capacity, deepens understanding, generates compassion, and initiates an inquiry into their human nature.

Remarkably, these exercises can be used effectively throughout the curriculum: in sciences, like physics, chemistry, and neuroscience; in social sciences, like sociology, economics, history, and psychology; in humanities such as art history, English, and philosophy; and in professional schools like nursing, social work, architecture, business, law, and medicine. Their exact use changes from discipline to discipline, but as we shall see, the diverse practices are deeply connected. TLCs, with their transdisciplinary connections throughout higher education, are perfect vehicles for disseminating information about these practices and helping to create working groups of interested faculty. In addition, once the contemplative practices are introduced, the centers are uniquely placed to gather and analyze data on student outcomes from these practices.

In this chapter, we provide an overview of the definition, intention, and benefits from contemplative exercises. Following that, we provide approaches to fostering these sorts of practices through university teaching and learning centers, as well as cautionary notes on using these practices. We hope that these descriptions will stimulate interest and inquiry into contemplative and introspective exercises and enable further discovery.

Introspective and Contemplative Practices

Contemplative pedagogy uses forms of introspection and reflection allowing students the opportunity to focus internally and find more of themselves in their courses. The types of contemplation are varied, from guided introspective exercises to open-ended *lectio divina* (“divine reading”) to simple moments of quiet, as are the ways in which the practices are integrated into classrooms. There is no easy way to summarize all the types of practices available. However, what unites them all is a focus on personal connection and awareness, leading to some insight.

As an introduction, we can present an overview using Figure 12.1, the tree of contemplative practices presented by the Center for Contemplative Mind in Society. This is not an exhaustive summary, but it does give an excellent overview of the basic categories of practices and types of practice within each.

Figure 12.1. The Tree of Contemplative Practices.

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Of course, practices from different categories can also be combined; for example, meditation can be combined with freewriting or journaling, or a movement exercise can be combined with the intentions of activist activities. The exact form of the practices introduced depends on the context, intent, and capabilities of the facilitator. You might already be familiar with practices that combine some form of personal reflection or contemplation that are not listed on the tree. We do not intend the illustration to be exhaustive; rather, we hope that it may demonstrate the wide variation in practice and perhaps give you new ideas about practices that you might want to learn and introduce.

Classroom introspective and contemplative exercises have a variety of objectives, including these:

- Attention building, mainly through focusing meditation and exercises that support mental stability.
- Introspection into the content of the course. Exercises are designed to have students discover the material in themselves and thus deepen their understanding of it. This is a personal form of the deeper critical reasoning in more traditional pedagogy.
- Building compassion, connection to others, and a deepening sense of the moral and spiritual aspect of their education (contemplative practices are uniquely situated to support this sort of inquiry).
- Perhaps most important, an invitation to begin an inquiry into the nature of their minds, selves, and their relationship to others. A simple meditation focusing on the breath can quickly lead to an inquiry as to where these intervening thoughts come from, an inquiry into the nature of our self-determination, and so forth. It can indeed be a profound moment for students to realize they are fully in control of neither their awareness nor their overall experience.

Some of the practices are focused rather narrowly on only one of these objectives, while others are combinations of each. Most often, they focus on one, but on reflection, they naturally open into the others.

Attention and Analytical Problem Solving

One of the more vaunted claims of higher education, and particularly of liberal arts colleges, is that we teach students “how to think.” But what does this actually mean? Surely our students can think, so in what sense do they need to be taught to think? This response could mean that we aid

them in developing their analytical problem-solving skills and their ability to creatively integrate different aspects of situations. Certainly one of the aspects of contemplative exercises is to develop these skills.

A key element in solving any problem is attention. Focus is clearly required in any multistage problem. Anyone who has ever attempted to solve complex problems knows the intense concentration and attention it requires. Contemplative exercises, many of them directly aimed at cultivating attention, hone this skill. Many neuroscience studies have documented the increase in attention skills from meditation practice. (For an overview, see Raffone & Srinivasan, 2010.) Of course, concentration is developed by any concerted effort. Musicians, dancers, and athletes, for example, all acquire high levels of concentration. However, problem solving also often requires thinking about a problem from various angles, so while attention is important, so is the ability to let go of a direction that is not working while focusing on (but not clinging to) another. Thus, a clear but not rigid attention is required to solve more open-ended insight problems, which require a moment of discovery.

Insight problems require thinking in different ways. Suppose you were to be asked to describe how to throw a ball so that it would travel a short distance, come to a complete stop, and then reverse itself. You are not allowed to bounce it off any surface or tie anything to it. As long as you think of the ball moving horizontally, you will not be able to describe the motion. Being keenly aware of the directions, however, you note that nothing in the problem states in which direction the ball should go. With this realization, you can think outside the constraint of throwing a ball as you normally do. In fact, if you think about how objects suspend for a moment when thrown up, you realize that throwing the ball up in the air would cause it to rise, stop, and then reverse. Psychologists M. Murray and R. Byrne (2005) argue that in order to solve these sorts of problems, people must have the capacity to hold different alternatives, along with the ability to switch their attention between alternative possibilities. These abilities are especially refined and honed by contemplative practices.

Logical analytical modes of thinking are just one aspect of our broad abilities. For many years, it was taken for granted that each person had a given level of intelligence, often referred to as the index *g* that simply determined cognitive ability. Teachers could support students in living up to the potential of their given level of intelligence, but essentially the die was cast. This view has come under serious criticism for a variety of reasons. First, the notion that some single metric can capture a meaningful notion of intelligence does not seem possible. As Howard Gardner, Robert

Sternberg, David Perkins, and others have argued, humans have different aspects of intelligence, most prominently captured by Gardner's (2004) idea of multiple intelligences. Second, whatever the intelligence might be, the notion that it is fixed within very tight bounds for all time has also shown to be incorrect. Stephen Jay Gould, in *The Mismeasurement of Man* (1996), argues convincingly that such a static metric does not capture how our abilities change over time. Indeed, in its rather conservative review of this issue, the task force designated by the American Psychological Association concluded that "a given person's intellectual performance will vary on different occasions, in different domains" (p. 77).

Robert Sternberg's *Beyond IQ: A Triarchic Theory of Human Intelligence* (1985) divides intelligence into three areas: analytical, creative, and practical. The analytical aspect is supported through contemplative exercises through the stabilization of the mind and the increased ability to focus that it supports. Logical problem solving involves clear, focused linear thinking, requiring the ability to concentrate and not be driven off-track by any distraction. Yet it also requires being open to inspiration and intuition. Creative aspects of problem solving are more synthetic, requiring the awareness of many possible solution avenues. Complex problems demand being able to see outside the constraints of strong initial attempts or useful heuristics that do not solve the actual, current problem. Founder of analytical philosophy Alfred North Whitehead famously pronounced, "Fools act on imagination without knowledge; pedants act on knowledge without imagination. The task of a university is to weld together imagination and experience" (1929, p. 93). Being aware of when to use a quick rule and when not to use such a rule is the first step in solving complex problems. Beyond that, learning not only how to focus but on what to focus is the essence of effective problem solving.

Deeper Understanding

Beyond cognitive skills, contemplative and introspective exercises can deepen students' understanding of the material presented. A practice like *lectio divina*, for example, provides students the opportunity to sink into their experience of reading, a rare chance given the amount of reading they are daily assigned. In chemistry courses, for example, Michelle Franci of Bryn Mawr College allows students an extended time simply beholding the figures of electron wave functions prior to discussing them. Students are given the chance to realize the impact of the words or graphs for themselves and can better understand the material from a clearer sense of their own experience. Students report that they can see the

regular, successive amplitude changes themselves and thus have a deeper connection to Bohr's correspondence principle that mathematically defines these changes.

No longer are these texts or figures something abstract or foreign to students; they are allowed the time to discern first what they see in them prior to examining them thoroughly in the course. In my economics classes, I (D.B.) provide students with the opportunity to experience directly the assumptions of the abstract models they are studying. Rather than give them only the definition and explanation of the Easterlin paradox or the relative income hypothesis, students are given a chance to examine their personal responses to exercises that have them experience and reflect on relative gains or losses and how they actually select to whom they compare themselves. In this way, they come to realize the importance of context and choice in matters of positional changes and have a deeper understanding of the theoretical literature. Carefully designed practices presented with care can locate the students directly in their own learning like no other practice we know, allowing students direct access to the material, which makes it more meaningful and understandable.

Connection

This third area—emotional regulation and intra- and interpersonal connection—is especially relevant for the application of contemplative exercises. Each student brings her or his own approach to the material, and it is often difficult to discern just how to reach students and how to treat them fairly because of this. In *Frames of Mind* (2004), Howard Gardner goes beyond logical-mathematical and linguistic modes of knowing and discusses others, like spatial, musical, kinesthetic, and “interpersonal” and “intrapersonal” intelligences. These last two are essential forms for anyone who must navigate personal meaning and the connection to others.

In a related vein, Daniel Goleman has written about his idea of emotional intelligence, and both Antonio Damasio (2000) and R. B. Zajonc (1980) have shown the central aspect of emotion in the process of decision making. Regardless of the nuances between these views, an increasing amount of evidence has shown that emotional awareness and regulation are essential for well-being and positive decision making. A whole host of teaching and learning methods has been developed out of these ideas, with various forms of teaching presentations and assessments designed to work with students' varying abilities. Mary Helen Immordino-Yang of the University of California's Rossier School of

Education has shown that contemplative exercises that focus on compassion and social connectivity are especially effective in this regard (see, for example, Immordino-Yang & Damasio, 2008).

Practical problems and their solutions require personal involvement and what Sternberg calls “action-oriented knowledge, acquired without the direct help from others, that allows individuals to achieve goals they personally value” (Neisser et al., 1996, p. 79). In our experience, contemplative practices can be especially powerful in supporting this sort of inquiry. Students directly engage with experienced aspects of what they are learning through the exercises and thereby glean meaning in a very practical manner. While all sorts of experiential learning have this quality, contemplative exercises have the special attribute that students do not need to leave the classroom to complete them and can replicate them easily on their own. The point here is not whether this is actually a specific form of intelligence but that broad problem solving requires this sort of thinking.

Personal Meaning

So while these three practices can hone attention, stimulate a deeper understanding of the material, and develop social connectivity, they also allow students to explore personal meaning, which might be the least well defined yet perhaps the most important. As noted in a study on spirituality in higher education conducted by Alexander and Helen Austin at UCLA's Higher Education Research Institute, students yearn for support in their search for personal meaning:

More than two-thirds (69%) consider it “essential” or “very important” that their college enhance their self-understanding and a similar proportion (67%) rate highly the role they want their college to play in developing their personal values. Nearly half (48%) also say it is “essential” or “very important” that colleges encourage their personal expression of spirituality [Parker & Zajonc, 2010, p. 117].

Although our students might call for it, we know that we are on thin ice in the area of morality and spirituality within the classroom. It is not without reason that professors are skeptical about the introduction of personal questions of spirituality and moral meaning in their teaching. Although we certainly agree that caution is appropriate, we also believe that we can support students in examining these issues for themselves. Because of the deeply personal nature of the exercises, they provide a framework for our students to begin to open to their own sense of

meaning—first to the material we are covering in the class and then to a broader and deeper sense of how their learning fits into the fabric of their lives. Meditation and introspection provide effective means for our students to become aware of their emotions and reactions, while at the same time helping clarify what is personally most important to them. For effective decision making, both of these qualities must be developed.

While we provide information and help students modify behavior, we do very little to help them discover and develop their deepest purpose. How can they decide without examining what truly matters to them? It is no wonder that students are calling out for this opportunity. It does not require much to engender this form of inquiry. For example, a simple exercise in which students are asked to focus on their breath can stimulate significant insights. When students realize that although they are committed to focusing on their breath and yet they somehow wind up thinking about this or that, they start to question the nature of their thinking. In what sense are these rising thoughts theirs? This quite naturally leads them to thinking about their wanting. If their thinking seems to come out of nowhere and does not seem to really be theirs, then if their desires arise in a similar fashion, are they really their desires? What sense does it make, then, to attempt to satisfy these wants even though they arise like the thoughts, seemingly from nowhere? These questions provide an opportunity for students to think deeply about the fundamental premise of economics: that consumers achieve well-being by attempting to satisfy their wants. This inquiry is initiated from within, from a personal insight, and so has far greater valence than a prompt from someone else.

The Role of Teaching and Learning Centers

Given the strong impact of contemplative practices on learning, TLCs can play an important role in supporting such practices. Dedicated to enhancing student learning on their campuses, TLCs provide key support across the curriculum and coordinate teaching and research networks across entire institutions. Thus, contemplative pedagogy programs have been developed successfully by and through TLCs, often in the form of faculty working groups. In addition to providing infrastructure, TLCs can offer clarity and legitimacy to forms of instruction and learning that might be regarded with skepticism if individual faculty members promoted them. Isolated practitioners or even separated small groups using contemplative pedagogy can find it very hard to coordinate across campuses and convince deans or curriculum review boards to approve courses. The unique position of TLCs thus

enables them to foster interdisciplinary coordination and work to overcome hostility or misunderstandings of these sorts of practices. Finally, TLCs often have the resources to study the impact of contemplative practices. Evaluative research on contemplative practices is currently underdeveloped and is needed to provide better outcome measures to legitimate teaching methods and test whether all types of students are equally benefiting from these practices.

In order to capitalize on the strengths of TLCs, the Center for Contemplative Mind in Society is hosting an initiative exploring ways in which college and university TLCs can introduce and support contemplative pedagogy within courses on their respective campuses. Over the past year, representatives of the center have been meeting with TLCs and giving workshops and lectures in order to showcase contemplative pedagogy. In September 2011, it hosted a planning workshop with a dozen leaders of TLCs and the leadership of POD. The center hopes to increase its consultation with TLCs across the country and develop a strategic plan that could include seed grants for curricular initiatives, increased inter- and intracampus networking, and collaboration and consultation to demonstrate and explain the role of contemplative practices in teaching.

Already several centers have developed programs incorporating contemplative practices. The Teaching Resource Center at the University of Virginia, the University of Colorado, and Vanderbilt University, for example, all have established resources. Vanderbilt's Center for Teaching's innovations over the past few years include a contemplative pedagogy working group, comprising faculty and graduate students from across the university; a Web-based teaching guide on contemplative pedagogy (<http://cft.vanderbilt.edu/teaching-guides/teaching-activities/contemplative-pedagogy/>); and a video, *Fostering Attention*, highlighting the ways in which Vanderbilt faculty have integrated contemplative practices into their classrooms (<http://youtube/wqRGJhW5wZE>). We hope that increasing collaboration can extend and deepen the use of these practices across higher education and see the key role that TLCs can play in this process.

Cautionary Tales

William James (1890) recognized both the appeal and problem of an integrated, contemplative pedagogy:

Whether the attention come by grace of genius or by dint of will, the longer one does attend to a topic the more mastery of it one has. And the faculty of voluntarily bringing back a wandering attention,

over and over again, is the very root of judgment, character and will. No one is *compos sui* if he has it not. An education which should improve this faculty would be the education *par excellence* [p. 424].

James focuses here on only on attention, describing its benefits as making us perceive, conceive, distinguish, remember, and react better than we would otherwise. James has been seen as a champion of the use of contemplative practices. However, he was always the careful thinker and cautions against excessive optimism. He continues: "But it is easier to define this ideal than to give practical directions for bring it about." He does not see introspection as a panacea, and neither do we. James continues to caution against the idea that focused awareness and introspection can cure problems in observation and insight:

But, since the rest of this volume will be little more than a collection of illustrations of the difficulty of discovering by direct introspection exactly what our feelings and their relations are, we need not anticipate our own future details, but just state our general conclusion that *introspection is difficult and fallible; and that the difficulty is simply that of all observation of whatever kind* [italics in original; p. 424].

While contemplative exercises provide another means for students to explore themselves and the material of our courses, they are by no means perfect or intended to replace other powerful means of teaching. Rather, they are powerful complements to instruction across the curriculum.

Because of the subtle difficulties of the practices, teachers wanting to employ them must have experience with them. These are not modes that can easily be taught in a single workshop; without a committed sense of what it is actually like to engage in these types of exercises, instructors will not be able to guide or respond to them. Their introduction and support should be accompanied by resources for faculty to engage in the practices themselves prior to presenting them to students. In addition, since these types of practices are often mistaken for religious practices, care must be given to ensure the greatest inclusive environment. Providing a bit of background to let students know that these practices are known across cultures all over the world allows access to students from all backgrounds. In addition, it is essential that students know that they do not need to adopt any particular beliefs in order to engage in the exercises; the practices are done more in the spirit of lab exercises, allowing students to experience the material and gain insight without any doctrinal position required. Finally, students come to our classrooms from many backgrounds. It is important that the practices be framed so that we

foster inclusion. Sometimes, though, this can be easily overlooked. For example, students who have felt silenced in their lives might bristle at the command to close their eyes and be silent; framing silence by an introduction emphasizing that the exercise allows more of the students to be fully engaged in the classroom. Learning about our students' backgrounds is important as we introduce the practices because we can easily alienate students without any intention or awareness of doing so.

Conclusion

Contemplative and introspective modes of learning have been an exciting development over the past decade. Placing students in the heart of their education fosters a rich environment for learning and provides the opportunity for students to foster attention, deepen their understanding of their studies, engender richer relationships with themselves and others, and stimulate profound inquiries into the nature of themselves and the world around them. We see that this important work can be greatly fostered by the work of teaching and learning centers and look forward to continued progress and cooperation in the future.

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