I approach the question of shaping worldviews as an educator and as one who, like so many, is moved by widespread violence and global economic inequities. What is it about worldviews that results in the identity politics of Iraq where Shiites, Sunnis, and Kurds all act along ethnic and religious lines, or in Darfur where issues of identity cut deeper, leading to Arabs perpetrating mass killing and rape against their Muslim brothers and sisters who are 'black Africans' from non-Arab tribes? What is it about worldviews that leads to a large and growing divide between the rich and the poor? In the face of increasing per capita GDP, the global median income is decreasing, and 100 million more are in poverty today than ten years ago. What can I as an educator offer in the face of these tragic realities of today’s world?

To offer an alternative or ‘better’ worldview is to no avail. In fact, efforts to promote that better viewpoint may initiate or aggravate conflict. In this article I advance a view of the human being in which the individual develops the capacity to move among worldviews, transcending particular identities while simultaneously honoring each of them. Even more, we can learn to live the complexity of diverse identities that are in truth ever-present in us as well as in the world. In reality, the interconnectedness of the world has its reflection in the connections among the diverse aspects of ourselves. When we find peace among the component parts of our own psyche, then we will possess the inner resources to make peace in a multicultural society. Only in this way will the crises I have mentioned be addressed at their roots. I see education—formal and informal—as the sole means of developing this remarkable human capacity for interior harmony, which in the end is the capacity for freedom and love.

The Function of Frames

The content of education is infinite in extent. Every day more information is available, new research is published, political changes occur, and businesses collapse. All of these demand our attention. Education is largely comprised of acquiring and organizing such information, and for this purpose students are taught the skills needed to assimilate and transmit information through reading, writing, and mathematics. But such simple input-output functions are but one dimension of education. Something more is needed to convert information into meaningful knowledge.

Surrounding and supporting the information we receive is the ‘form’ or structure of our cognitive and emotional life that goes largely unobserved. To understand how information becomes meaningful, we must turn our attention to this hidden container or ‘frame of reference,’ as Jack Mezirow termed it.

A frame of reference is a way of knowing or making meaning of the world. Enormous quantities of sensorial and mental data stream into human consciousness, but somehow that stream is brought into a coherent meaningful whole. At first sight it may seem that such meaning-making is an entirely natural and universal process, and to some degree it certainly is. Evolution has incorporated reflexes and drives deep into the human psyche. But the way we make sense of the world is also conditioned profoundly by societal forces, among them education. That is to say, we are socialized into a worldview that operates largely unconsciously and behind the scenes, but which affects the way we understand what we see, hear, and feel. According to the Leo Apostel Centre for Interdisciplinary Studies in Belgium, "A worldview is a map that people use to orient and explain the world, and from which they evaluate and act, and put forward prognoses and visions of the future."

In the course of a lifetime we may shed one worldview and adopt another. In other words, we can change the structure that makes meaning for us. Thus while worldviews can be understood as deep cognitive structures, they are not immutable. The solutions to Darfur and economic inequality (among many other problems) will ultimately not be found through more information or better foreign aid programs, but only here at the level where information marries with values to become meaning. Human action flows from this source, not from data alone.

An education that would reach beyond information must work deeper; it will need to transform the very container of consciousness, make it more supple and complex. For this, we educators need pedagogical
tools other than those optimized for information transfer. At its most advanced stage, we will need to help our students and ourselves to create a dynamic cognitive framework that can challenge established intellectual boundaries, and even sustain the conflicting values and viewpoints that comprise our planetary human community.

Challenging Conventional Divisions

In recent years I have spent time with members of the Native American Academy, a group largely comprised of academics who are also Native Americans. In our meetings we have explored the character of Native knowledge systems and research methods in comparison to those of orthodox Western science. From the first, the differences were marked. The place of our meeting was of special consequence, Chaco Canyon. It is the site of an ancient indigenous settlement whose remaining structures are clearly aligned according to a detailed astronomical knowledge. Following a long drive we turned onto the approach road, stopping in the middle of nowhere to make a small offering of bee pollen and tobacco. The first evening included a long ceremony performed by a knowledge-keeper from the local Native population, which concluded with a sensitive presentation of the problems we were likely to encounter in our endeavors.

The sacred and the secular so seamlessly blended in the indigenous mind contrasts strongly with the conventional division between science and spirituality in the modern West. In the Western worldview, science is often defined in opposition to spirituality. My work with Native American colleagues challenges that presupposition at its root. Our time is one in which such unreflective assumptions must increasingly be challenged.

Last year I was seated among over 10,000 neuroscientists listening to the fourteenth Dalai Lama address them concerning the interaction between Buddhist philosophers and Western scientists. The occasion was the annual meeting of the Society for Neuroscience, and the Dalai Lama was the keynote speaker because of his groundbreaking collaborative work to bridge the traditional cultural divide between science and the contemplative traditions. Because of his openness and that of a growing number of scientists, Buddhist meditative insights have been joined to scientific research in ways that are very fruitful for the fields of cognitive science and psychology. This is a second example in which traditional divisions have been challenged with fruitful consequences.

Contemplative Pedagogy

One of the most powerful transformative interventions developed by humanity is contemplative practice or meditation. It has been specifically designed to move human cognition from a delusory view of reality to a true one: that is, to one in which the profound interconnectedness of reality is directly perceived. Global conflict has its deep source in the privileging of worldviews, in the reification of our particular understanding and the objectification of the other. Such ways of seeing our world are, at root, dysfunctional and divisive. Contemplative practice works on the human psyche to shape attention into a far suppler instrument, one that can appreciate a wide range of worldviews and even sustain the paradoxes of life, ultimately drawing life's complexity into a gentle, non-judgmental awareness.

The usefulness of secular contemplative practice is being increasingly appreciated by educators at hundreds of North American universities and colleges. For example, in collaboration with The Center for Contemplative Mind in Society, the American Council of Learned Societies has granted 120 Contemplative Practice Fellowships to professors over the last ten years, supporting them in designing courses that include contemplative practice as a pedagogical strategy. At conferences and summer schools at Columbia University and Amherst College and elsewhere, professors have gathered to share their experiences in the emerging area of contemplative pedagogy. Their efforts range from simple silence at the start of class to exercises that school attention; and most recently, to innovative contemplative practices that relate directly to course content. The 2005 Columbia Conference focused specifically on the role of contemplative practices in “Making Peace in Ourselves and Peace in the World.”

Courses are offered that range from theater to economics, from philosophy to cosmology, in which university teachers are experimenting with a wide range of contemplative exercises, thus creating a new academic pedagogy. I have become convinced that contemplation
benefits both students and faculty, and that secular contemplative practices should assume a significant place on our educational agenda. Contemplative practices fall into two major classes, those that school cognition and those that cultivate compassion. We are well aware that our observation and thinking require training, but we often neglect the cultivation of our capacity for love. In his letters to a young poet, Rainer Maria Rilke wrote, "For one human being to love another, that is perhaps the most difficult of all our tasks, the ultimate, the last test and proof, the work for which all other work is but a preparation. For this reason young people, who are beginners in everything, cannot yet know love, they have to learn it. With their whole being, with all their forces, gathered close about their lonely, timid, upward-beating heart, they must learn to love."5

We are well-practiced at educating the mind for critical reasoning, critical writing, and critical speaking as well as for scientific and quantitative analysis. But is this sufficient? In a world beset with conflicts, internal as well as external, isn’t it of equal if not greater importance to balance the sharpening of our intellects with the systematic cultivation of our hearts? We must, indeed, learn to love. Educators should join with their students to undertake this most difficult task.

Thus true education entails a transformation of the human being that, as Goethe said, "is so great that I never would have believed it possible." This transformation results in the human capacity to live the worldviews of others, and even further to sustain in our mind and heart the contradictions that are an inevitable part of engaging the beautiful variety of cultures, religions, and races that populate this planet. We can sustain the complexities of the world because we have learned to honor and embrace the complex, conflicting components of ourselves. Our inner accomplishments, achieved through contemplative education, translate into outer capacities for peace-building. From there it is a short distance to the perception of interconnectedness and the enduring love for others, especially for those different from us.

We are increasingly becoming a world populated by solitudes. When Rilke declares that the highest expression of love is to "stand guard over and protect the solitude of the other," he is expressing his respect for and even devotion to the uniqueness of every person and group. If, however, we are to avoid social atomization or the fundamentalist reaction to this tendency, we will need to learn to love across the chasms that divide us. Only a profoundly contemplative and transformative education has the power to nurture the vibrant, diverse civilization that should be our global future. As Maria Montessori wrote, "Preventing conflicts is the work of politics; establishing peace is the work of education."6

4 See the description of the Academic Program of the Center’s website: www.contemplativemind.org.

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Contemplative pedagogy not only provides a way of helping students to concentrate more effectively, it incorporates ways of teaching and learning that can provide a very different learning experience by opening up new ways of knowing. This is achieved by moving beyond a technical, scientific training to incorporate body, mind and spirit by allowing the space for students to incorporate who they are and to understand how they are changed by what they learn. Contemplative pedagogy not only offers fresh challenges and perspectives to students. As educators contemplative pedagogy provides us with a beautiful yet formidable challenge to really turn up and be present. Contemplative pedagogy empowers students to integrate their own experience into the theoretical material they are being taught in order to cultivate and develop attention, deepen their understanding, foster greater connection to and compassion for others, and engender engaged inquiry into their most profound questions. Each year more and more faculty, administrators, leaders of teaching and learning centers, and other education professionals seek out best practices in contemplative teaching. In this book, Dan and Mirabai do an excellent job in demonstrating how these transformative contemplative practices can be sensitively introduced to academia. I didn’t develop contemplative practices until I was middle aged. I wish I had had such practices in my college days. This is a link to Contemplative and Transformative Pedagogy by Arthur Zajonc, professor of physics at Amherst College: http://www.fetzer.org/images/stories/pdf/contemplative_pedagogy.pdf. The CUNY Contemplatives Network (http://cunycontemplatives.pbworks.com/w/page/8185079/FrontPage) The Association for Contemplative Mind in Higher Education (http://www.acmhe.org). Robert Farrell joined the group Contemplative and Transformative Pedagogy 6 years, 3 months ago. Valerie Eveline Paul joined the group Contemplative and Transformative Pedagogy 6 years, 3 months ago. Contemplative Education is aligned with Somatic, Integral and Transformative Education and has its origins in the Wisdom Traditions and work of educational pioneers such as Rudolf Steiner, John Dewey and Maria Montessori. It is described as holistic and progressive and contrasted with mainstream or conventional forms of education that focus on the acquisition of knowledge, development of cognitive skills and individual achievement. Contemplative pedagogy: A quiet revolution in higher education. New Directions for Teaching and Learning, 134, 83–94. Zeidan, F. (2010).