Leaders in education are always searching for ways to improve academic outcomes and develop citizens who enjoy successful, happy, productive lives while contributing to the well being of society as a whole. This high ideal is now realizable by supplying one missing ingredient to education-technologies to develop higher states of consciousness.

Traditionally, education has focused primarily on what a student studies—mathematics, physics, art, literature etc. However, education has lacked a systematic means to unfold the full value of the consciousness of the student—qualities such as alertness, creativity, intelligence, receptivity, and breadth of comprehension. As a result, increasing academic demands on the student are not accompanied by an increase in the student’s capacity to learn. This failure to expand the student’s “container of knowledge”—this failure to unlock the hidden reserves of the brain—not only restricts the full expression of the inner genius of the student but also leads to the accumulation of fatigue and stress, resulting in the epidemic of stress-related health and behavior problems prevalent in society today.

Over 600 scientific studies performed at more than 250 universities and research institutes in 33 countries, and published in over 100 peer reviewed journals have confirmed that Consciousness-based education, which includes the Transcendental Meditation and TM-Sidhi program, develops higher states of consciousness, as evidenced by increased brain integration, growth of creativity and intelligence, improved academic outcomes, decreased stress and anxiety, lower levels of substance abuse, a decline in school bullying, and reduced crime and violence in society.

Consciousness-Based Education in Schools

Consciousness-Based education has four basic components, all of which contribute to the same goal of awakening the total creative potential of the student for a fulfilling successful life. These four components are as follows:

- **Courses for the development of consciousness**, including the Transcendental Meditation and TM-Sidhi program, which provide the experience of higher states of consciousness and the intellectual understanding of that experience.

- **Study of the standard disciplines** in the light of the knowledge of the full potential of consciousness.

- **Teaching and curriculum practices** that holistically develop the student toward more expanded levels of awareness.

- **A healthy, stress-free routine and nourishing environment.**
The Transcendental Meditation and TM-Sidhi Program

Transcendental Meditation is a simple, natural, effortless mental technique practiced for 15-20 minutes twice a day, sitting comfortably with eyes closed. During the practice the mind settles down and gains the experience of a silent, yet fully alert, state of awareness-pure consciousness. At the same time the body settles down and experiences a deep level of rest and relaxation, a physiological state opposite to that experienced during stress (Dillbeck & Orme-Johnson, 1987). This experience of pure consciousness is now recognized to be a fourth major state of consciousness—Transcendental Consciousness—uniquely different from waking, dreaming, and sleeping. Regular experience of Transcendental Consciousness rejuvenates and revitalizes the physiology (Wallace, Dillbeck, Jacobe, & Harrington, 1982), resulting in higher brain integration and increased wakefulness (Travis et al., 2009), reduced stress and anxiety (Eppley, Abrams, & Shear, 1989), and a wide range of benefits in all areas of life (Roth, 2011).

The TM-Sidhi program, including Yogic Flying, is an advanced program that can be learnt after a few months of practicing the Transcendental Meditation technique. This advanced program integrates inner silence of the mind with dynamic activity of the body, resulting in high levels of coherent brain functioning (Orme-Johnson & Haynes, 1981).

Examples of Schools Using Consciousness-Based Education

Maharishi School of the Age of Enlightenment. The first Consciousness-based school in the world, Maharishi School of the Age of Enlightenment, in Fairfield, Iowa, opened its doors in 1974. The school, which is on the campus of Maharishi University of Management, gradually grew to include a middle school and high school. Despite having open enrollment with no entrance exams, the school has drawn international acclaim for its students’ achievements in academics and for awards in areas of science, mathematics, drama, poetry, history, sports, and creative problem solving (Deans, 2005).

For example, in the performing arts, since they started competing in 1988, Maharishi School students have won the highest award in the state more often than any other school. In the creative problem solving competition Odyssey of the Mind, Maharishi School students have won the world finals four times and attained the most top ten finishes at the world finals. In sports, students have won the state tennis championships 17 times and have also won the state golf title.

Studies published in the journal Education (Nidich, Nidich, & Rainforth, 1986; Nidich & Nidich, 1989) found that students just beginning at Maharishi School performed about average on standardized tests but improved significantly over time, compared to controls. In the high school, each grade level consistently outperforms 99% of their peers in the United States on standardized tests and almost 100% of the students go on to attend university, resulting in the Iowa Department of Education awarding the school with special accreditation as a college preparatory school.
Maharishi School in the United Kingdom. In the United Kingdom, Maharishi School, a Consciousness-based school in Lancashire, has been classified as “outstanding” by the Office for Standards in Education (OFSTED), a government body set up to assess standards in schools. Maharishi School students have won many top place medals in the U.K. Mathematics Challenge (out of over 200,000 entries), gained first place in the Salters’ Festivals of Chemistry at Manchester University, achieved membership of the National Association of Gifted and Talented Youth, and garnered many first prizes in national poetry competitions.

The Liverpool Echo reported that the exam results at Maharishi school, which does not have entrance exams, “Places it in an academic elite with a better record than schools such as Eton and Westminster” (Tolley, 2002). Based on these outstanding achievements the school was recently awarded free school status by the British government. This means that the school is now 100% government funded with additional free Consciousness-based schools being planned throughout the country.

Consciousness-Based Education in the Public School System. In 1992, Dr. George Rutherford, an educator and public high school administrator, visited Maharishi School in Iowa. He was so impressed by the happiness of the students that he decided to introduce Consciousness-based education into his public school in Washington, D.C., which was experiencing a wide range of problems being located in what was known at the time as “the murder capital of the country” (Urbina, 2006).

Dr. Rutherford introduced two 20-minute periods of “quiet time” into the daily schedule so students had the opportunity to practice the Transcendental Meditation technique. He immediately noticed he wasn’t breaking up fights any more. Test scores went up, attendance improved, and teachers and students felt less stressed and more enthusiastic about coming to school.

Speaking at the Harvard Club, Dr. Rutherford said, “I have tried every program that you can name at my school. I don’t care what it is-you name it I’ve tried it . . . in 42 years I’ve done it all believe me. But I found out there is only one program you need in your school to resolve every problem you’ve got—and that is Transcendental Meditation” (Rutherford, 2006).

In San Francisco, a middle school principal, whom the National Association of Secondary School Principals named Middle School Principal of the Year for 2007-2008, introduced Transcendental Meditation in 2007 as part of a quiet time program. Prior to offering the Transcendental Meditation program this school was known as the “fight school” (Nobori, 2012); following the introduction of the program, fighting and suspensions decreased, and attendance went up. The principal describes the change in school climate as follows: “Our kids are coming to school. They are more motivated, more confident, more focused, more successful, and more joyful. Our teacher turnover and absenteeism is almost zero” (Dierke, 2011).

Nidich et al. (2011) reported that those students at the school, who prior to learning Transcendental Meditation had been performing in the lower achievement groups for mathematics and English, improved their scores significantly in one semester compared to controls. After seeing the data and visiting the school, Superintendent of Schools Dr. Carlos
Garcia said, “Every barrio, ghetto school in America has to have the fundamental right of having an opportunity to do this type of thing. This is a small investment to be made not only economically but from a social justice, a civil rights point of view” (Garcia, 2011).

Consciousness-Based Education Around the World. Recently, the Government of Brazil sent a fact-finding delegation to Maharishi School in the U.K. and as a result, the ministry of education has requested that the program be offered in 38,000 schools in Brazil. In India, Consciousness-based education is now offered in the largest chain of privately owned public schools in the country, with over 100 schools serving almost 100,000 students. In Melbourne, Australia, and in Victoria, Canada, Consciousness-based schools receive half of their funding from their respective governments. To date, Consciousness-based education has been introduced to almost half a million students in hundreds of schools in 53 countries, resulting in significantly improved academic outcomes and enhanced quality of student life.

**Unfolding the Inner Genius of Every Student**

We know from neuroscience that everything we do changes our brain (this is known as neuroplasticity); for example, if a right-handed student learns to play the violin, the area of the brain responsible for moving the fingers of the left hand will form more neuronal connections than the area of the brain responsible for moving the fingers of the right hand. Similarly, when students are trained in various disciplines—physics, economics, music, sports etc., these activities enliven various parts of the brain physiology. However, nothing is offered in education today to develop the whole brain physiology.

As we shall see, extensive EEG research reports that while fragmented knowledge results in fragmented brain development, the experience of Transcendental Consciousness results in holistic brain development.

The Experience of Transcendental Consciousness Enlivens the Whole Brain

Increased orderliness of brain waves, measured by EEG, is seen globally in all areas of the brain—front, back, left and right—in students practicing Transcendental Meditation (Travis, et al., 2010). Travis et al. (2009) also found significant increases in brain integration using measures of broadband frontal coherence, power ratios, and preparatory brain responses.

Broadband EEG coherence in the frontal cortex not only increased during meditation it also increased over time outside of meditation even while students were engaged in problem solving tasks (Travis & Arenander, 2006). This study supports an earlier study (Travis, 2002) reporting that EEG coherence in the front of the brain was higher in the meditation group than the control group during a task requiring rapid decision-making. These findings are of particular importance for education because the frontal cortex is the area of the brain associated with executive functions such as planning, impulse control, and moral reasoning.

These findings confirm earlier studies (Dillbeck & Bronson, 1981) reporting significantly increased EEG coherence within two weeks of learning the Transcendental Meditation technique. Higher EEG coherence has also been reported resulting from practice of the advanced TM-Sidhi program (Travis & Orme-Johnson, 1990; Orme-Johnson & Haynes, 1981).
Physicists, such as Dr. John Hagelin (1987), have suggested that the whole brain is enlivened by the experience of Transcendental Consciousness because the field of pure consciousness is the origin of all streams of knowledge. Hagelin has identified the field of pure consciousness with the unified field of quantum physics—the origin of the whole diverse universe. Simply put, Hagelin suggests that the source of objective existence (the outer universe) and the source of subjective existence (pure consciousness) are the same unified field, which is open to human awareness at the source of thought. In this model, it is the experience of the transcendental field of total knowledge within that enlivens the whole brain.

Enhanced Mental Abilities. Everything good about the brain depends on its coherent functioning. Higher frontal EEG coherence has been found to improve efficiency of concept learning (Dillbeck, Orme-Johnson, & Wallace, 1981) and to correspond to higher levels of moral development (Nidich, Ryncarz, Abrams, Orme-Johnson, & Wallace, 1983; Nidich, Nidich, & Alexander, 2000).

A study published in the journal Intelligence (So & Orme-Johnson, 2001), reported that after six months, compared to controls, students who had learned the Transcendental Meditation technique exhibited increased creativity, fluid intelligence, and practical intelligence, together with decreased levels of anxiety.

A pilot study on children with ADHD symptoms (Grosswald, Stixrud, Travis, & Bateh, 2008) found statistically significant reductions in stress and anxiety, as well as improvements in ADHD symptoms and executive function. A follow up study (Travis, Groswald, & Stixrud, 2011) reported significant increases in EEG coherence after three months of Transcendental Meditation practice, together with significant improvements in five ADHD symptoms over six months.

Improved Health. Stress related disorders are growing not only in the general population but also amongst children and young adults. Rising rates of hypertension, adult-onset diabetes, anxiety, depression, ADHD, alcohol and drug abuse, bullying and violence are clear evidence of epidemic levels of stress amongst our youth.

The Transcendental Meditation technique has been found to be the most effective way to dissolve the harmful effects of stress and to increase longevity (Schneider, et al., 2005). Students who practice Transcendental Meditation have been found to suffer from less hypertension (Barnes, Treiber, & Johnson, 2004) and to spontaneously reduce their consumption of alcohol, cigarettes, and drugs (Alexander, Robinson, & Rainforth, 1994).

Compared to controls, Orme-Johnson (1987) reported a marked decrease in hospital admissions in all categories of disease and Orme-Johnson and Herron (1997), Herron and Hillis (2000), and Herron (2011) found significantly decreased health care costs over several years following instruction in the Transcendental Meditation technique.

These findings of improved health and longevity confirm that schools now have the opportunity to make education “prevention oriented” so that students are not only well prepared
academically but also have the knowledge to help prevent disease, allowing students to enjoy a long, healthy, and productive life.

Improved Social Behavior. Schecter (1978) reported that after 14 weeks of Transcendental Meditation high school students had grown significantly in tolerance, creativity, intelligence, innovation, and self-esteem, while decreasing in anxiety. Barnes, Bauza, and Treiber (2003) reported that students who had learnt the Transcendental Meditation technique showed significant reductions in absenteeism, rule infractions, and suspensions from school. Even with highly stressed populations, such as prisoners, studies have reported significant improvements in social behavior, including decreased hostility and reduced recidivism (Alexander, Rainforth, Frank, Grant, & Von Stade, 2003; Abrams & Siegel, 1978).

Creating the Basis for a Peaceful World

Nearly fifty studies have reported that when as few as 1% of the population have learned the Transcendental Meditation technique, a measurable reduction in acute social stress occurs as measured by decreased crime rates (Dillbeck, Landrith III, & Orme-Johnson, 1981). An even more powerful influence of coherence is generated when the Transcendental Meditation and TM-Sidhi program, including Yogic Flying, is practiced in a group equal to, or exceeding, the square root of 1% of the population (Hagelin, et al., 1999; Hatchard, Deans, Orme-Johnson, & Cavanaugh, 1996; Orme-Johnson, Alexander, Davies, Chandler, & Larimore, 1988).

This research confirms the practicality of schools becoming lighthouses of coherence and positivity for the nation, reducing the acute social stress that fuels crime and violence. For example, in Canada, with a population of just under 36 million, the square root of 1% of the population is around 600, the size of a typical small high school.

In future, with Consciousness-Based education, schools will not only graduate happy, successful, productive citizens they will also contribute to dissolving acute social stress. This is the principle of creating national invincibility by preventing the build up of negativity inside the nation and preventing negativity from impacting the nation from outside.

In the coming years, a few permanent groups of 9,000 Yogic Flyers (which will soon be the square root of 1% of the world’s population) will be established to reduce social stress on a global scale. Good progress toward this end has already been made; since the middle of the 20th century about 5 million people have learnt the Transcendental Meditation technique and groups practicing Yogic Flying have already been started in schools and colleges worldwide.

It is interesting to note that Professor Steven Pinker at Harvard has recently published data indicating “We may be living in the most peaceable era in our species’ existence” (Pinker, 2011, p. xxi). He also notes that, “The second half of the 20th century saw a historically unprecedented [emphasis added] avoidance of war between the great powers” (p. 190).
How to Implement Consciousness-Based Education

The first step in implementing Consciousness-Based education into a school is to have the principal and a significant number of school administrators, staff, and teachers learn the Transcendental Meditation technique from qualified instructors. The course is taught in seven steps as follows:

- An introductory lecture (1 hour).
- A preparatory lecture (1 hour).
- A personal interview with a qualified instructor.
- Personal instruction (privately with the instructor).
- Three sessions of group instruction.

A few weeks later, after permission has been obtained from parents and the governing authorities, students are offered the opportunity to learn the Transcendental Meditation technique and the school incorporates two 15-20 minute periods of quiet time into the daily schedule. Students who choose to meditate do so twice a day in their classrooms, while any remaining students do some quiet activity such as silent reading. After a few months, high school students are offered the opportunity to begin the TM-Sidhi program, including Yogic Flying. The remaining three components of Consciousness-based education are introduced gradually on a timetable convenient for the principal.

Conclusion

The benefits of introducing Consciousness-Based education into a school become apparent immediately. Academic performance improves and the school climate becomes more harmonious as teachers and students enjoy decreased stress levels and more considerate behavior. The result is a fulfilling educational experience that benefits the students, teachers, and parents, and at the same time generates an influence of peace and harmony in the society as a whole.
REFERENCES


doi: 10.1023/A:1009559327351


Schneider, R. H., Alexander, C. N., Staggers, F., Rainforth, M., Salerno, J. W., Hartz, A., . . .


