

CONSCIOUSNESS-BASED EDUCATION: THE FUTURE OF EDUCATION

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In addition to the three commonly experienced states of consciousness – waking, dreaming, and sleeping – extensive research has revealed that there is a fourth major state of consciousness, known as restful alertness or transcendental consciousness, in which the individual experiences a state of pure awareness at the source of thought. Consciousness-based education provides this experience of transcending, which has been missing from the standard educational curriculum until now. The experience of transcendental consciousness, as documented by hundreds of published, peer-reviewed studies, provides the physiology with a deep level of rest and relaxation – essential for dissolving the harmful effects of stress. In addition, EEG research indicates that the experience of transcending results in greater brain integration and improved cognitive function, resulting in increased creativity and intelligence, improved moral reasoning, better impulse control, and enhanced sense of self. These findings indicate that regular transcending provides a simple, practical means to unlock the hidden reserves of the brain, thereby allowing education to provide more than just information and skills and attain its highest ideal, which is to lead out the inner genius of every student.

Key words: Transcendental Meditation, Consciousness-based education, brain integration, stress.

Introduction

The word education can be traced back to its Latin origins – from ex- “out” + ducere “to lead”. Therefore, if we take the word education literally it should involve a process of “leading out”. However, many students experience that education involves precisely the opposite – a process of “cramming in” – involving the memorization of facts to be regurgitated in an exam. Could it be that education is supposed to be more than merely acquiring skills and information and that something fundamental is being overlooked? Could there be a system of education that not only provides information and proficiency in subjects such as mathematics, music, and language arts, but also succeeds in leading out the total creative potential of the student? In this paper we will examine a rapidly growing system of education known as Consciousness-Based education, which, in addition to providing knowledge of the traditional academic disciplines, aims to develop the full value of the consciousness of the student – leading to increased wakefulness and alertness, creativity and intelligence, receptivity, and breadth of comprehension.

1. The Importance of Increasing Brain Integration

Higher levels of electroencephalographic (EEG) coherence resulting from the prac-

tice of the Transcendental Meditation technique have been reported for more than three decades. Higher coherence, a mathematical measure of the EEG activity recorded at different locations on the scalp, is associated with higher levels of creativity, learning ability, and moral reasoning (Orme-Johnson & Haynes 1981; Dillbeck & Bronson 1981; Dillbeck, Orme-Johnson & Wallace 1981; Nidich et al. 1983). A randomized control trial with high school students in Taiwan, 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.

More recently, a randomized control trial on university students who learned the Transcendental Meditation technique showed improvement, compared to controls, on a 'brain integration scale,' which includes coherence (Travis 2002), measured outside of meditation while performing a computer task; the meditating students also displayed increased alertness and increased resistance to stress (Travis et al. 2009).

Higher levels of brain integration have also been associated with greater success and effectiveness in a variety of professions, such as musicians (Travis, Harung & Lagrosen 2011), athletes (Harung et al. 2011), managers (Harung & Travis 2012), and product development engineers (Travis & Lagrosen 2014).

It is clear from this research that increasing the brain integration of every student should be a primary goal of every educational system. The Transcendental Meditation program and advanced TM-Sidhi program is a simple, natural means to increase the brain integration of every student and help fulfill that goal. With increasing brain integration, students naturally become more accomplished and begin to grow in the qualities that we normally associate with the brightest and most gifted.

2. The Importance of Reducing Levels of Stress

The findings of increased EEG coherence and brain integration resulting from the practice of the Transcendental Meditation technique form part of a body of more than research 600 studies, many of which have been published in independent peer reviewed scientific and medical journals, reporting positive educational, health, and behavioral outcomes, such as growth of creativity and intelligence, reduced stress and anxiety, and improved social behavior.

The experience of transcendental consciousness is uniquely different from waking, dreaming, and sleeping and is has been recognized to be a fourth major state of consciousness (Wallace 1970) – a unique physiological state of restful alertness characterized by physiological changes opposite to those of stress (Dillbeck and Orme-Johnson 1987).

Regular experience of this fourth state of transcendental consciousness not only increases brain integration it also is effective in combating the harmful effects of stress. For example, biochemical markers of stress, such as cortisol and plasma lactate, have been found to decrease during the practice of the Transcendental Meditation technique (Jevning et al. 1978; Jevning, Wilson & Davidson 1978). These findings are consistent with the significant reduction of stress and anxiety that has been found by meta – analysis to be unique to the Transcendental Meditation technique, compared to other forms of meditation or relaxation. (Eppley, Abrams & Shear 1989; Orme-Johnson & Barnes 2013). Randomized con-

trolled research has also reported reduced anxiety, in comparison to controls, among a student population (Travis et al. 2009).

The Transcendental Meditation technique has also been shown to be effective in reducing temporal and chronic stress, reducing symptoms of attention-deficit hyperactivity disorder (ADHD), and improving executive function (Grosswald 2013). In a randomized controlled trial, students aged 11-14 who had been diagnosed with ADHD and who were instructed in the Transcendental Meditation technique, displayed after three months a reduction of the abnormal EEG patterns that characterize ADHD and an increase in EEG coherence, as well as increased executive function, and verbal fluency, compared to control students (Travis, Grosswald & Stixrud 2011).

These findings of reduced stress and anxiety are highly significant for the well being of both students and for society as a whole. According to the Chartered Institute of Personnel and Development's (CIPD) *Absence Management Report* for 2013 (CIPD 2013), more attention must be put on reducing stress because stress is the top cause of workplace sickness. Indeed, stress has been called "The black death of the 21st century" (Barrow 2011).

Adding the Transcendental Meditation technique to the curriculum of every school and university will not only make educational outcomes more successful and the process more enjoyable, it will also increase student resiliency to stress so that they will naturally enjoy better health during their lifetimes. For example, Orme-Johnson (1987) reported a 50% reduction in hospital admissions amongst practitioners of Transcendental Meditation compared to controls and in a randomized control trial Schneider et al. (2005) found that heart attack stroke and death were reduced by almost 50% over 5 years in heart patients who learned the TM technique compared to those assigned to health education. These findings show that we now have an opportunity to make education prevention oriented.

4. Experiences from Schools around the World

In the United Kingdom, the *Liverpool Echo* reported that the exam results at Maharishi School, a government funded free school in Skelmersdale, near Liverpool, which incorporates Transcendental Meditation into the daily routine of the students, "Places it in an academic elite with a better record than schools such as Eton and Westminster" (Tolley 2002). This result is in spite of the fact that the school is located in a disadvantaged area of the country and does not have entrance exams. Similarly, results at Maharishi School of the Age of Enlightenment in Fairfield, Iowa, USA, are equally remarkable, where in addition to high levels of academic and artistic performance, students have won the world championships in the creative problem solving competition Destination Imagination more often than any other school in the world (Nidich, Nidich & Rainforth 1986; Nidich & Nidich 1989; Deans 2005).

Similar outstanding results have been reported wherever the program has been implemented. Speaking at the Harvard Club, Dr. George Rutherford, a school principal from the Washington D.C and Baltimore areas of the United States, 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, where, since 2007, the program has been applied in a format known as Quiet Time, the Middle School Principal of the Year for 2007-2008 (an honor bestowed

by the National Association of Secondary School Principals) reported that following the introduction of the program, academic performance improved, fighting and suspensions decreased (Dierke 2011) and attendance went up (Nobori 2012).

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. Colbert and Nidich (2013) found a similar pattern of results in a high school on the East Coast, reporting a significant decrease in drop out rates and higher college acceptance rates. Elder et al. (2014a) reported significant reductions in stress and anxiety in high school students and benefits for teachers and administrators that included significant declines in stress, depression, and burnout (Elder et al. 2014b).

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, Transcendental Meditation and the advanced TM-Sidhi program, including Yogic Flying, 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, schools that have incorporated Transcendental Meditation into the curriculum receive half of their funding from their respective governments. To date, Transcendental Meditation has been introduced to almost half a million students in hundreds of schools in 53 countries, resulting in significantly improved academic outcomes, improved health (Barnes, Treiber, & Johnson 2004) enhanced quality of student life, and improved student behavior (Barnes, Bauza, & Treiber 2003) and reduced criminality in the society, particularly after the introduction of the advanced TM-Sidhi program (Hagelin 1987; Hatchard et al. 1996; Hagelin et al. 1999).

5. Implementing Consciousness-Based Education

Consciousness-Based education has four components. The first component consists of courses on consciousness to provide direct experience and intellectual understanding, including instruction in the Transcendental Meditation technique. This component is offered firstly, by qualified instructors of the Transcendental Meditation technique, to the principal and a significant number of school administrators, staff, and teachers, After a couple of months, a series of parent education meeting are held and then those students who have obtained written permission from their parents are instructed in the Transcendental Meditation technique.

The Transcendental Meditation technique is taught in seven steps as follows:

1. An introductory lecture (1 hour)
2. A preparatory lecture (1 hour)
3. A personal interview with a qualified instructor
4. Personal instruction (privately with the instructor)
- 5, 6, 7. Three sessions of group instruction

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. Following that, the remaining three components of Consciousness-Based education are introduced gradually on a timetable convenient for the principal.

These further three components of Consciousness-Based education consist of a) study of the standard disciplines in light of the knowledge of the full potential of consciousness; b) teaching and curriculum practices that holistically develop the personality toward more expanded levels of awareness; and c) a healthy, stress-free routine and nourishing environment.

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: improved academic outcomes, decreased stress and anxiety, lower levels of substance abuse, a decline in school bullying, reduced drop out rates, and reduced crime and violence in society. The result is a fulfilling educational experience that benefits the students, teachers, and parents, and at the same time generates a wide range of benefits for all areas of life and an influence of peace and harmony in the society as a whole (Roth 2011).

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Գիտակցության վրա հիմնված կրթություն. կրթության ապագան

Լայնածավալ հետազոտությունները վկայում են, որ գիտակցության արթմնի, երագի և քնի վիճակներից բացի կա նաև գիտակցության չորրորդ վիճակ, որը հայտնի է որպես հանդարտ զգոնություն կամ տրանսցենդենտալ գիտակցություն, որում անհատն ունենում է մաքուր գիտակցման փորձառությունը մտքի ակունքում: Տրանսցենդենտալ գիտակցության փորձառությունը ֆիզիոլոգիային տալիս է հանգստի այն անհրաժեշտ խորը վիճակը, որը ստրեսի վնասակար ազդեցությունները տարրալուծելու բանալին է: Միևնույն ժամանակ ԷԷԳ-ի արդյունքները վկայում են վկայում են, որ տրանսցենդենտալ փորձառումը առաջ է բերում ուղեղի ավելի բարձր ամբողջարկում և ճանաչողական գործառում, որն էլ իր հերթին հանգեցնում է ստեղծարարության և իմացականության աճի, բարոյական դատողության լավացման, ներագրականների ավելի արդյունավետ կառավարման և ես-ի ավելի լավ գիտակցման:

Образование на основе сознания: будущее образования

Кроме трех обычных состояниях сознания – бодрствования, сновидения и сна- многочисленные исследования показывают, что существует и четвертое состояние сознания, которое известно как спокойное бодрствование или трансцендентное сознание, в котором человек переживает состояние чистого осознания в источнике мысли.

Опыт трансцендентного сознания приводит к состоянию глубокого физиологического отдыха и релаксации, необходимого для элиминирования вредных эффектов стресса. Кроме того, по показаниям ЭЭГ опыт трансцендирования приводит к большей интеграции мозга и повышению уровня когнитивного функционирования, в результате чего возрастают созидательный и интеллектуальный потенциал, активизируется мораль, улучшаются контроль импульсов и самоосознание.