Human engineering through spiritual education

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Abstract
The paper deals with the Human Engineering through spiritual education. The paper based on the combination of idealism and realism philosophy which signifies the integral part of Human Engineering through spiritual education. In this paper an attempt has been made to recognize, comprehend, find out, analyze, synthesize, evaluate and critically examine the dominant factors responsible for Human Engineering through Spiritual Education. The paper concludes that ‘Human Engineering through Spiritual Education’ as “Human Engineering is the application of Science and Technology in terms of Behavioral Sciences for developing Affective Behaviors within Human Beings and to prepare them to solve the everyday problems for real and practical life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest knowledge and wisdom, if the Human Engineers enable to modify such kind of behavior patterns of Human Beings, - this is Human Engineering through spiritual education

Keywords: Human, engineering, spiritual education

1. Introduction
1.1 Human Being
Human being is the best creation of God. In Zoology, man is considered as the supreme creature in the hierarchy of animal kingdom. In sociology, man is social animal because of his social relationship is studied in it. Man is considered as a Bio-Psycho-Social organism in Psychology and his physical, mental and social aspects is studied. In physical aspect, his physical growth and development is studied. In mental aspect, his mental development, intelligence, and capacities and capabilities are studied. In social aspect, his social-ability, adjustment capacity, social behavior and personality are studied.

Each and every human being who is supreme creature of god on this earth grows biologically, psychologically, socially, culturally, emotionally as well as spiritually for well-being. Human well-being is the end of the education. Well-being refers to physical, mental, social, cultural, ethical, aesthetical, emotional and spiritual health of the human being. Thus, the education is means for this end. Our educational system equipped with this spiritual education.

In the view of Ranald Macaulay, “Man’s experience, though was “Spiritual” from the very beginning, as soon as man was made, man was made within a religious framework. Man was physical; he had a body with a bone structure, a blood system, nerves, muscle tissue and all the rest. But man was more than physical. Man was what we today call a person. Man was able to relate to everything, himself and God included, as a person. He could think, love, create, discern right from wrong, communicate in language, enjoy beauty and so on.”

1.2 Engineering
The term Engineering is derived from Latin word ‘Ingeniere’ which means that to design or to device. Engineering, the application of Science and Technology to create useful products and services, is a powerful driver of social and economic development. It is vital in addressing basic human needs such as health, agriculture, drinking water, industry, building, energy, transport, disaster prevention and poverty eradication. There is increasing concern about declining enrolment in engineering studies which will compromise the achievement sustainable development (UNESCO pp-16). US Department of Labor defined Engineering as “Engineers apply the principles of science and mathematics to develop economical solution to technical problems. Their work is the link between scientific discoveries and the
commercial applications that meet societal and consumer needs.” “Profession in which knowledge of mathematics and natural sciences, gained by study, experience, and practice, is applied with judgment to develop ways to use, economically, the materials and forces of nature for the benefit of mankind (Accreditation Board for Engineering and Technology)”

1.3 Human Engineering
Human engineering is one of the biggest problems that confront us today. There is evidence that spiritual education is likely to affect many aspects of life for all people around the world, and that existing solutions such as human engineering might be too risky and ordinary behavioral and market solutions might not be sufficient to mitigate it. In this paper, the author considers a new kind of solution with respect to what it is called human engineering through spiritual education, which involves social behavior modifications of human beings so that they can adapt to spiritual education. It is argued that human engineering is potentially fulfilled by spiritual education and that it could help behavioral organization solutions succeed in human engineering. We also consider some possible ethical concerns, moral and character building concerns, aesthetic concerns, cultural development, social development, physical development, mental development, psychological development, philosophical development, emotional development, peace and harmony development, logical development, self-development, national and international development and so on regarding human engineering such as its safety, the implications of human engineering for our individuals of the society, and it is argued that these concerns can be addressed and human engineering deserves further consideration in the debate about spiritual education. The aim of Human Engineering is to implement convergent and divergent thinking in terms of Science as Art, combining the science of teaching with the art of the teaching. The teaching learning process should be provided in a scientific manner applying as many devices and making teaching activities meaningfully, purposefully and more effective. However, human beings and art, which inspires teaching and adds creativity, should take a part in the instruction process. The teacher's art should be applied in accordance with the application of science and mathematics to learn behaviors and to build products and services useful for human beings by exploring the effectiveness of teaching learning processes.

1.4 Spiritual Education
Srivastava (2014) [4, 5] “It was in India that the spiritual education was developed from Vedic age to Modern one. Educational thinkers, saints, philosophers, social reformers and spiritual leaders like Guru Bhashishth, Guru Valmiki, Guru Dornacharya, Krishna, Mahavira, Buddha, Kapila, Kanada, Gautam, Patanjali, Jammini, Yajnavalkya, Panini, Sankacharya, Ramaanuja, Badarayana, Guru Nanak, Dhyaneswara, Kalidas, TulsI Das, Kabir Das, Rabi Das, Kautilya, Raja Ram Mohan Roy, Swami Dayananda Sarswati, Ravindranath Tagore, Ram Krishna Parmahans, Vivekananda, Dr. Annie Besant, Pandit Madan Mohan Malvka, Giju Bhai, Mahatma Gandhi, Acharya Vinoba Bhave, Sir Syed Ahmed Khan, Lokmanya Bal Gangadhar Tilak, Dhodo Keshav Karve, Gopal Krishna Gokhale, Acharya Narendra Dev, Sri-Aurovindo Ghosh, Dr. Radhakrishnan and Dr. Zakir Hussain have encouraged the spiritual education in our country. And they are considered as the greatest exponent of spiritual science. Eastern Branch of Philosophy developed the spiritual science. The chief sources of spiritual science in India are the four Vedas, six Vedangas, four Uypedas, and four Brahmanas, one hundred and eight Upanishad Six system of Philosophy, The Bhagwad Gita, and three Smritis.” All of them provide spiritual education for the spiritual development of the society as a whole and they are human engineers who reflect spiritual education for achieving highest and ultimate aims of education which are beneficial for human engineering and soul doctoring. The chief sources of spiritual science of India are the most important manuscripts of human engineering.

1.5 Association of Human engineering with Spiritual Education
Human engineering is the application of science and technology by applying laws, theory, principles, scientific and technical knowledge and activities, new ideas, and truth for human beings has been considered. Keeping the view of human well-being, Srivastava (2014) [4, 5] defines it as, “Spiritual education is education which is devoted to the transformation of ideas, appraisal and studies on contemporary educational thought and practice and solving everyday problems of human beings.”

2. Need and Significance of the Study
The study is needed and significant from several points of view not only in bringing excellence among individuals but also in revealing the probable interplay between cognitive and non-cognitive aspects of education. Besides cognitive competence and skills, there is a need of social skills which will build up spiritual development. National Curriculum for School Education, NCERT (2000) [3] has observed that curriculum has to provide learning experiences which will improve individual’s thoughts, feelings and actions. Very few researches have been developed to study human engineering through spiritual education in our country India and its contribution to the field of education, spiritual education is less explored. The study is philosophical in its nature because it indicates normative aspect of education with respect to aim of education, curriculum, and method of teaching, discipline, students, teachers and schools. This study has sociological bases of education because of being related to social needs according to society. This study covers psychological aspect of education for instance growth and development of the students, learning, motivation, personality development and adjustment. It is well known fact India is spiritual based society. Some of the scholars felt that after independence the spirituality gradually disappear and it will have no impact on Indian educational system. India is a developing country but where development is required in each and every sphere of human life. Spiritual education and its implications are increasing day by day. For the appearance of the spirituality in the development of the educational system, in this connection, Kothari Commission (1966) points out, “In the development that we envisage in the future, we hope that the pursuit of men, material affluence and power would be subordinated to that of higher values and the fulfillment of the individual. This concept of mingling of ‘Science and Spirituality’ is of special significance for Indian Education.”
The article indicates that an analysis of the various problems of human engineering through spiritual education in India in the philosophical, sociological and global perspectives, may be accepted by the researchers and practitioners of spiritual studies for carrying out research on what is required is that the individuals as well as society internalize the understanding of the Human Engineering through Spiritual Education and bring about a dynamic change in their living patterns. It seems that it should receive a very high priority. In a nutshell there is need and significance that we subscribe to the emerging spiritual culture. It is clear that human engineering through spiritual education is playing a significant role in determining the process of spiritual welfare of mankind within the framework of modern spiritual society.

In this paper an attempt has been made to recognize, comprehend, find out, analyze, synthesize, evaluate and critically examine the dominant factors responsible for strengthening human engineering through spiritual education and its impact on education of today and tomorrow in Indian society. This study may help the students to understand and to solve the problem of education more efficiently. They may flower into excellent of our nation. Hence the investigator has decided to conduct the present study.

**Statement of the Problem**

On this background, the problem for the purpose of study may be stated as: “Human Engineering through Spiritual Education”

**3. Purpose of the Study**

The purpose of the study is to recognize and define Human Engineering through spiritual education, find out to recognize factors responsible for strengthening Human Engineering through spiritual education, critically examine factors responsible for strengthening Human Engineering through spiritual education, to analyze factors responsible for strengthening Human Engineering through spiritual education, to comprehend factors responsible for strengthening Human Engineering through spiritual education, to analyze factors responsible for strengthening Human Engineering through spiritual education, to synthesize factors responsible for strengthening Human Engineering through spiritual education and apply its metaphysical thought and action in the field of modern education and its impact on present educational system.

**4. Delimitation of the Study**

Keeping in view the limitation of time, resources and energy, the study is limited to one aspect of the subject which is Human Engineering through spiritual education. It is entirely based on the secondary data as for examples-books, journals, periodicals, newspapers etc. this constitutes a major constraint of the study.

**5. Review of Related Literature**

Working with the paper Spiritual Education in Swami Dayananda Philosophy, Srivastava (2015) [6-10, 12] concludes that ‘Spiritual Education’ as “it is education which helps to fulfill the potentialities of the individuals through the method of Divine Worship and the virtues of Non-violence, Perseverance, Control of mind, Non-stealing, Purity, Wisdom, Study, Truth, Tolerance, Control of senses, and non-anger and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest knowledge and wisdom, if the teachers enable to modify such kind of behavior patterns of individuals, - this is spiritual education.”

Working with the paper Spiritual Education in Gandhian Philosophy, Srivastava (2014) [4, 5] concludes that ‘spiritual education’ as “it is education which enhances capabilities, capacities, competencies and skills of the individuals through faith in Universal Spirit, love and sympathy, truth, honesty, non-violence, social justice, patience, tolerance, and wisdom to solve the everyday problems creatively and constructively in the new situation of the socio-psycho-physical environment for attaining ultimate aim of education.”

Working with the paper Spiritual Education in Tagore Philosophy, Srivastava (2015) [6-10, 12] concludes that ‘Spiritual Education’ as “the education which helps to fulfill the potentialities of the individuals through the Doctrine of Mother Nature, Universal Brotherhood, Freedom, Service, Co-operation, Love, Sympathy, Wisdom, Peace and Harmony, Truth, Tolerance, Self-control, Self-Confidence, self-expression and Self-Realization and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest ideas and values of education, if the teachers enable to modify such kind of behavior patterns of individuals in the lap of Nature, - this is spiritual education.”

Working with the paper Spiritual Education in Sri Aurobindo, Srivastava (2015) [6-10, 12] concludes that ‘Spiritual Education’ as “is the highest level of education which helps to fulfill the potentialities of the individuals through the Universal Brotherhood, Freedom, Service, Co-operation, Knowledge, Power, Beauty, Love, Sympathy, Wisdom, Peace and Harmony, Truth, Tolerance, Self-control, Self-determination, Self-Confidence, self-expression and Self-Realization and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest ideas and values of education, if the teachers enable to modify such kind of behavior patterns of individuals in the free and creative environment, - this is spiritual education.”

Working with the paper, Srivastava (2015) [6-10, 12] concludes ‘Spiritual Education’ in term of Adolescents’ as “it is education for them (the adolescents) which enhances capabilities, capacities, competencies and skills of the adolescents reflected through feeling potentialities such as Universal Brotherhood, Freedom, work is worship, and knowledge, Positive attitudes, Co-operation, Strength, Service, Love, Wisdom, Peace and Harmony, Tolerance, Self-Confidence, self-expression, self-concept, self-esteem, self-development, and Self-Realization to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest values and ideas of education, if the teachers enable to modify such kind of behavior patterns of adolescents, - this is spiritual education.”
Working with the paper Spiritual Education in Dr. Annie Besant’s Philosophy, Srivastava (2015) [6-10, 12] concludes the ‘Spiritual Education’ as “it is education which helps to fulfill the inherent capacity of the individuals through the Theosophical Idea of Education based on the Unity of God (Universal Source of all existence) and Universal Brotherhood, Self-control, Self-analysis, Self-respect, Control of mind, self-realization, self-interview, spiritual policy, Love and Sympathy, Service, Freedom, God-realization Patience, Peace and Tolerance and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest knowledge and wisdom, if the teachers enable to modify such kind of behavior patterns of individuals, - this is spiritual education.”

Working with the paper Spiritual Education in Sri Shankaracharya’ Philosophy, Srivastava (2016) [11] concludes the ‘Spiritual Education’ as “it is education which helps to fulfill the potentialities of the individuals through the virtues of Control of mind, control of senses, Purity, meditation, self-knowledge, self-interview, Wisdom, Shardha to Study of Vedanta, Truth, Tolerance, sanyas and solution to the problem and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest knowledge and wisdom, if the teachers enable to modify such kind of behavior patterns of individuals, - this is spiritual education.”

6. Methodology
Methodology takes a significant role in any type of research as the reliability and validity of the findings depend upon the methods adopted and applied in the study. This paper is descriptive in nature. It is mainly based on secondary data and is largely collected from different sources like books, journals, articles, and periodicals.

7. Analysis and Interpretation
According to THE HINDU (2009) [2], a Newspaper published from Delhi, states “The human body is itself used as a teaching point, and it is shown that there are five sheaths of koshas in which the Self is manifested as the Jivatma. They are food (Anna), life (Prana), mind (Manas), intelligence (Vijñana), and bliss (Ananda). The individual Self is the microcosm representing the different aspects of the universe, the macrocosm. Just as one has to cross many thresholds to perceive the deity in the sanctum sanctorum, the individual has to penetrate through the sheaths in the body to realize the Self within. The pupil gradually understands that each of these is a vital aspect of the universe.”

The concept, meaning, aims, directions and principles in the term of human engineering through spiritual education have been dealt with clarity and deep insight. Before we discuss the factors responsible for strengthening human engineering through spiritual education, it is essential for us to know the meaning of spiritual education. Working with the paper entitled Spiritual Education in Vivekananda’s Vedanta Philosophy and Yoga, Srivastava (2015) [6-10, 12] concludes that ‘Spiritual Education’ as “the education which helps to fulfill the divine potential of the individuals through Doctrine of Divinity, Universal Brotherhood, Freedom, Fourfold Yoga of work, worship, contemplation and knowledge, Optimism, Strength, Service, Love, Wisdom, Peace and Harmony, Truth, Tolerance, Self-control, Self-Confidence and Self-Realization and to prepare them to solve the everyday problems for life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest values and ideas of education, if the teachers enable to modify such kind of behavior patterns of individuals, - this is spiritual education.”

After reviewing the related literatures on spiritual education, it is felt that there is a great deal has been done by Indian human engineers to trace the development of philosophical and non-material thought and action with special reference to spiritual doctrines and assumptions for the human engineering, much has also been done to spiritualize education to draw in broad an outline of human engineering through spiritual wealth and much has so far been also done to investigate the spiritual intelligence of human beings for recreating and reconstructing a spiritual society in our country. Thus, the chief sources of spiritual basis of education of India are the knowledge-hub of human engineering. All the books and writings, of course, yield useful information regarding human engineering through spiritual learning and training, and also give details of spiritual basis of education as well as help in progressive basis of education for the betterment of the pupils of the society as a whole.

8. Conclusion and Suggestion
The paper concludes ‘Human Engineering through Spiritual Education’ as “Human Engineering is the application of Science and Technology in terms of Behavioral Sciences for developing Affective Behaviors within Human Beings and to prepare them to solve the everyday problems for real and practical life creatively and constructively in the new situation of the socio-psycho-physical environment for attaining the highest knowledge and wisdom, if the Human Engineers enable to modify such kind of behavior patterns of Human Beings, - this is Human Engineering through spiritual education.” The paper suggests in building a new system of education and emphasizes much importance to spiritual development and believes that a spiritual revolution would take place in the country. The Human Engineering based on spiritual vision, is considered as scientific instrument in bringing about a peaceful and silent social engineering revolution in terms of harmony, peace, love and sympathy, patience, progress and prosperity.

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