MODELING EDUCATION ON GENIUS

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BY WILLIAM GEORGE JORDAN, 1923

HE world's most urgent need is not a new crop of geniuses. We could get along very comfortably even if we did not have a new great book, a new marvelous discovery, a new revolutionary invention, or a new superb painting or piece of sculpture for a hundred years to come. The great geniuses of the past still live in their works. They still speak their undying messages of revelation, beauty, truth, inspiration and wisdom. Though

still speak their undying messages of revelation, beauty, truth, inspiration and wisdom. Though we have listened to them we have learned but a small part of their inspiring quality. We have not even begun to exhaust the genius of either past or present.

What the world *does* need most is a better, finer, broader type of average men and women, with healthy bodies, sound, trained minds, spiritually alive to the bigness of their individual possibilities and the greatness of real living. We need men and women trained to think, not merely to think they think. Thomas A. Edison declares that "most men never amount to much because they don't *think*." Prof. William James said that the average man uses only about one tenth of his brain. Dr. Elmer Gates¹ claims that under usual circumstances and education, children develop less than ten per cent of the cells in their brain areas.

This is a ghastly commentary on our educational system. There are about 24,000,000 children in the public elementary, secondary and high schools of the United States. The system is maintained at a cost of over a thousand million dollars a year. When this vast army of children shall have completed their education, not a single one of them will, as the result of the process, have been trained to think. Not one of them will have the powers and faculties of their minds directly and consciously exercised, developed, and placed under their individual control.

We need to train the children for the seven lives they must live: the physical, the mental, the moral and ethical, the social, civic, the aesthetic and emotional, and the spiritual. Education is cold, soulless, uninspired and uninspiring. It is merely a complicated unnatural process, based on supreme faith in its curriculum and its methods. It never tests to determine if it is developing powers or training the mind, but merely examines to determine the percentage of its knowledge that remains unevaporated.

We need a new ideal, a new inspiration, a new philosophy of education. This will be found in Genius. It will not be revealed by the study of one genius or of one type but only by discovering the qualities or powers common to all genius. We usually consider genius as far removed from ourselves as the North Star. We are so conscious of the differences between us and the world's greatest minds that we fail to realize the qualities that are common to genius and to all men. Approaching genius from this near side, we may have a new revelation.

The conventional idea is that genius is wild, erratic, defiant of law. If this were true the greatest lights of the ages, the men who have guided and inspired the world, would be Nature's failures or Nature's rebels. This is unbelievable. Whatever a genius does along the line of his perfected power he does with the maximum of effect and the minimum expense of mental energy. He represents the straight line in thinking, the shortest distance between a perfect impression and a

perfect expression. He does the best thing in the best way, putting into it not only the best of his mind but the best of his whole nature. Genius instead of being wild, erratic and in defiance of law, should be defined as simply the perfect unconscious obedience to the law for a given effect. It is the incarnate revelation to man of the perfect working of mind in some line. Therefore genius should be our model.

A four-leafed clover might be called a genius among clovers, because of its occasionalness, but under the microscope every three-leafed clover shows the germ of the fourth leaf. The four-leafed clover is a clover that has made good—that's all. A genius is merely a man who has made good—that's all. The genius merely shows on a colossal scale the flowering of qualities, faculties and powers that exist in rudiment or in miniature in all men. The difference is not of kind, but of degree. From the feeblest germ of ability in any line, up through aptness, cleverness, great cleverness, talent, to the supreme manifestation of unquestioned genius, no new process enters, none different in kind from what we all use. The difference is only in intensity, in perfection, in degree of development.

In considering genius as a model for education we must guard carefully against a possible misconception. It is not believed, in this view, that all men are born with equal minds or equal possibilities or that by any training in the world they can be made equal. This new model is not a process that would take an average child, put it through a certain course for years and turn it out a genius. It is believed, however, that if we exercise the whole mind, in the spirit and in accord with the principles which the genius applies with supreme concentration and intensity along one line of power, our minds will be stimulated, enriched, broadened, and raised to their maximum of power.

We all have latent powers and special aptness of some kind, of which we may be unconscious, or which if we do know we do not train and cultivate. If the average man fails in life, or lacks any special power, if he cannot remember names or faces, if he has no imagination, no initiative or resourcefulness, if he has no taste for literature, art or music, if he has no appreciation of beauty or if he lacks in any way, he says, "I am as God made me." If he succeeds he proudly proclaims himself "a self-made man." He would not have these mental deficiencies if the education of today were what it should be.

Geniuses do not thus surrender. They made themselves great through the untiring energy by which they overcame and triumphed. Many of them had in the beginning no more power than that of ordinary men, till some chance word, some book, some suggestion, some inspiration, revealed a slant or liking, that determined their lives, that roused and kindled all their energies, and developed their feeling into a real love.

Genius is not a single essence, gift or power by which a Napoleon could have made himself a Mozart, a Galileo, a Michelangelo or an Edison. Genius is not exchangeable into a different type. It is a blend or combination that determines and limits the slant of the genius. The basis of the genius is not initially mental, but spiritual. It is a strong dominating emotion, a great, intense, glowing, pervading love. It may be love of beauty, of Nature, of truth, of humanity, of spirituality, of mechanics, of language, of justice, of freedom or of some other of the big impelling things of life. The love of Nature may make one man a Wordsworth, another a Ruskin,

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a Linnaeus, a Thoreau, a Burroughs, a Darwin, a Burbank or some great painter like Corot, but it would not make a Lincoln or a Luther, inspired not by love of Nature but by love of humanity.

From such a great love comes a supreme desire, aim or purpose, inspiring devotion, enthusiasm, power of attention, and concentration, generating tireless energy, continuity, persistent labor, determination and will, stimulating self-confidence, self-reliance and sensitiveness to new impressions from every source. These glowing forces acting on developed senses, memories, observation, judgment, imagination, reasoning and clear thinking raise them all to higher powers, individuality asserts itself and the creative power dawns and finally brightens into the sunburst.

This is the process of genius reduced to its lowest terms. The world proclaims it a miracle, a divine mystery, but the genius is not formed in a different mould from us. The mechanism of his brain is the same as ours. The course of his thought and action are the same. The difference is only in degree of activity and development. He has enriched the soil and cultivated it where we may have only neglected fields run to weeds.

Education fails with the average human being; it fails even more with the exceptional. The geniuses and the men of talent or of signal ability, have a strength of mind, a fineness and an individuality that refuses to be pressed, like soft pulp, into an artificial mould. A whole book could be written on the great ones who were failures, dolts, dunces, or rebels at school. Among them may be mentioned: Milton, Wordsworth, Hawthorne, Darwin, Spencer, Huxley, Newton, Dryden, Byron, Thackeray, Heine, Balzac, Keats, Shelley, Napoleon, Lowell, Wellington, Longfellow, Voltaire, Mark Twain, Scott, James Fennimore Cooper, Henry Ward Beecher, Bacon, Locke, Hobbes, Gray, Goldsmith, Dr. Johnson, Gibbon, George Bernard Shaw, Stevenson and a host of others.

Some of the others had little or no education, except what they gave themselves, men of power and individuality like Lincoln, Franklin, Farragut, Dickens, Pope, Burns, Carnegie and Livingstone. Babbage, one of the world's greatest mathematicians, was said to be "the stupidest boy in the whole school in arithmetic." Nearly every one of the mathematical prodigies, with a genius for marvelous mental calculation lost all of this power when trained along the line of orthodox education.

How does all this apply to the 24,000,000 children in the public schools of America and to the countless millions of other children in the world? How can we model a system of education on genius? What would it mean were we to transform by changes in spirit and method our present system to accord with the new ideal?

It means a distinctly different attitude toward the child. Because genius shows that the mind develops best when it is acting with pleasure on what it loves, the things that make school life a torture and a fear should be removed. Examinations, lessons from text-books and bad marks would be abolished. They force the child to learn by rote mere words untranslated into mental images of any kind. Under such conditions the mind cannot expand freely.

Because genius reveals the trained senses as of supreme importance, all of them should be exercised to bring only clear, vivid impressions to the mind. The kindergarten training in its

simple rudimentary exercises goes a few steps where we should go leagues. Reuben Post Halleck, an authority on this subject, declares that this training should be direct, progressive and continuous until the twentieth year.

Because genius constantly seeks self-expression, constantly seeks to use what it has in its mind, constantly seeks to externalize an inner vision as an outward fact, constantly seeks to give a perfect expression to a perfect impression, we should train the children in this same, free, expanding and vitalizing process. Whether genius expresses itself in a great book, a play, a statue, a painting, a philosophy or any other of its myriad forms, the process is always the same. Education ignores this or defies it. Education means today constant crowding, jamming impressions, with no corresponding expression.

Because every genius analyzes along the line of his genius, because he seeks to discover through analysis the law or reason behind phenomena, because he then seeks to apply that law in new fields by analogy, we can assume that this is the right mental attitude, the one that brings best results, and in harmony with this should we train the children.

Because genius, whatever be its line of activity, always develops individuality, always thinks out for itself, always has intense appreciation of beauty in some form that becomes its ideal and inspiration, always develops originality, always intensifies its imagination and holds it controlled by its reason, we should train in this spirit. Because genius has initiative, courage, confidence, constructive and creative power, observation, thoroughness, judgment, fine ability to appreciate fine distinctions, we should train the children in the same spirit and seek to lead them to acquire the same powers and qualities, though in a lesser degree.

These characteristics of genius and others that might be named are common to all genius. A genius, it is true, may not manifest them in every phase of his life and activities, but they are constant factors in the genius part of his mind, its finest, sanest, healthiest best. You may say it is a far cry from genius to the average, normal child. If you think this, you are mistaken. The child, fresh from the arms of Nature, before he has been perverted by education, manifests all the powers and qualities of genius. They are in miniature, it is true; they are primitive, tentative, active, reaching out, seeking and hungering for development. It is as if Nature, in safeguarding the race, sought to give each child a fair start, a fair chance. Nature starts every child geniusward. Education, in its blind, fatuous, blundering, forces the child through a false artificial process, ignores everything we know of the human mind and its workings, and tends to stifle, dull or deaden every natural process of the mind.

To show the closeness of the analogy between the working of the mind of a child and that of genius would require many printed pages, a few high-spots must suffice. As one element of his power, every genius has an unusual sense development. The artist genius has a highly developed visual sense, which keynotes his imagination and other mental powers. The great composer has a finer sense of auralizing. The sculptor genius has developed visualizing for form and an unusual tactile sense. A great surgeon has this same development of touch. A great chef, like Brillat-Savarin², is a gustatory genius. So is it for every other form of genius. Universal genius then would have all the senses developed.

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The child, before being weakened by education, uses all of its senses. Give him a rubber ball and he looks at it, smells it, puts it to his mouth to taste it, place: it near his ear to listen to it, and handles it and seeks to feel its weight on his tiny palm. A short time in school stifles the process forever.

The child constantly analyzes. It uses the great "W" words—who, why, what, when, where, which and how. These are the very words every genius uses in infinite application. He constantly desires like the genius to know the law, principle or reason governing things, and he shows this with his staccato "whys." He reasons by analogy, as the genius does. His fund of knowledge is small and inadequate; the results, therefore, are often wrong and ludicrous, but his *process* is always right.

The child uses imagination to a degree that makes us older ones marvel. The child who draws a horse on his slate puts into it imagination just as true in its essence as Michael Angelo put into his sublime frescoes. The difference is only in degree. So could the parallel of other powers be shown.

We must first arouse the child's interest if we would develop its love. Educators know well the "interest" theory. They make a mistake however when they merely seek to make a dull study interesting, as we sugar-coat a pill to induce the child to swallow it. Instead of this we should give the child knowledge that appeals to it and exercise its mind on what is intrinsically interesting. We should train it in appreciation of beauty in all its phases. Let us fill its mind with the beauty of color and of form, of the world around it, the beauty, the wonder, the romance that makes the senses keener and the imagination tingle when we learn the secrets of the flowers, the trees, the waters, the clouds, the hills, the mountains, and the star sprinkled sky. In this spirit, which is that of genius, the child's mind and all its other powers would be wakened in a way that would be impossible from mere dry facts from dull text-books.

No accumulation of mere facts ever makes one wise. It is in connecting and correlating these facts in new lines of reason, imagination and association. Thinking, itself, is merely seeing things in relation. The "how" of this process is one of the revelations of genius.

Wherever we truly train a sense and exercise the individual consciously to analyze the impression we stimulate the observation, intensify the memory of that sense, appeal to imagination, test by reason and affect the whole process of thinking. As in genius the increased love in some line calls forth energy, continuity, patience and the other forces that mould the genius; so would it be in a lesser degree in our schools with average children. What genius does often without consciousness of process, we would exercise with intense consciousness. The range of exercise would cover all the seven lives of the individual. The detail of the exercises or even the merest outline of a school program cannot, of course, be given here.

The common conception of genius is that it is a marvelous innate power with which they are divinely endowed, and all that genius has to do is to radiate it. Most geniuses started with but a feeble germ of ability that through long years of concentration, devotion, heroic struggle and effort, pain and sorrow, blood and sweat, they finally evolved into real greatness. It is not a compliment but an ungrateful insult to say to them, when they have not only mastered and

perfected their genius but accomplished the harder task of forcing the world to listen to them and finally to recognize them: "You were born so."

Genius, like the average man, has two creators—his God and himself. The second creator develops and perfects what the first has begun. Aeschylus³ wrote his first tragedy at twenty-five, but despite all his effort did not win a prize till he was forty-one. Byron's⁴ early poems were the veriest [utmost, most complete] trash. Schliemann⁵, the great explorer and archaeologist, had an abominable memory. He determined to make it strong, and finally succeeded so that he used to learn a new language every six months and could speak, read and write it fluently. Macaulay⁶ had a good memory; he made it a miracle by his own methods. Hawthorne⁻ repudiated his first book and would not permit it to be reprinted.

Every great orator in history was a failure in the beginning. Paderewski⁸ was expelled from one of the great conservatories of Europe and told he could never learn to play the piano. He was seriously recommended to study the piccolo as he then could always get a job in an orchestra. Verdi wrote for twelve years and produced eighteen operas before he brought forth "Rigoletto," his first score of intrinsic merit, perhaps excepting "Ernani." Harvey⁹ spent nineteen years of labor to discover fully the full course of the circulation of the blood.

Henry Irving¹⁰ failed in his first appearance, and was urged by all his friends to go back to the desk and ledger. Shelley's first poem "Queen Mab" was poor stuff, flimsy and incoherent. Edison worked from 18 to 20 hours a day for seven months trying to teach a phonograph to pronounce the letter "s." We look upon Chopin as having his genius handed to him on a gold platter yet his practice at the piano was so incessant that he caused a permanent injury to his spine by sitting on a stool with his back unsupported for hours at a stretch, repeating a single bar over and over again for nearly a thousand times.

These men made themselves geniuses by their own supreme efforts, raised what might have been mere mediocrity or perhaps talent to supreme power.

What holds back most of us from fuller development is our resignation to ourselves as we are, our belief that because we do not possess a certain power that we cannot acquire it. We are under the spell of the old belief that we are born into the world with fixed limited powers with a limitation as to possibility. The biggest, finest, sanest view of life and science prove this to be false. The mentally dull may develop into a genius, the physically weak into a Sandow¹¹, the spiritually small may lead the world as a great reformer. How far we can progress we can never determine in advance, but that we can progress depends finally only on ourselves. Man is put into the world not as a mechanical music-box with three or four predestined airs but as a human violin capable of infinite music. It is in the early years of life when the mind is plastic that the process is easiest and here Education has her great opportunity.

In every phase of human thought and activity, except in education, the one that is of supreme importance, the world has consciously or sub-consciously recognized the genius model. If a man has heart trouble, assuming it is functional, not emotional, he goes to a physician, who tests it with the best instruments known to science. He tests it in relation to the perfect heart, the genius heart, that may not exist in any human. He marks it in terms of par for the genius heart.

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From it he learns not only diagnosis but treatment. He seeks to put the heart under study into harmony with the cardiac laws made manifest in the perfect heart.

We feel that the physical laws obeyed in the making of a Sandow appeal to all of us, apply to all. We give our children, learning to write, the best engraved models we can procure. We read to them biographies of the world's greatest men and present them as models. Artists sit at the feet of the world's masters and study their brush-strokes to improve their own. In a spiritual sense Christ is the genius of moral and spiritual law. The best Christian does not seek to do what Christ did but merely to obey the moral and spiritual laws made evident in His life and teaching.

Genius, everywhere the model—except in education.

Nature through the ages has ever been saying to man: "In the minds and work of the world's geniuses I have sought tirelessly to reveal to you the true model for your educational system. I have sent a thousand messengers and you have not listened nor heeded. I have sent millions of children into the world, all started geniusward, all speaking the same message. Why do you balk every effort of mine to help? Is it that you are blind, or deaf, or stubborn, that you will not listen, that you will not hear, that you will not do? You are cheating, with your silly, stupid system, the children out of their birthright. You are holding back the race from its rightful progress. You are making the world suffer from ills and wrongs from which it would be free if you only would teach them to think, if you would only train them to see the right, to know the right, to do the right and to live the right. How much longer will you persist in your wrong methods, your false system, in hopelessly poor results?"

Some may say: "This sounds all right. It is pretty theory, but is it practicable, feasible, possible?" We would again remind you that such an education in most of its essentials was given in Athens over twenty-four centuries ago and that today, with an even clearer vision than theirs, we could do still greater things.

Froebel¹² found his inspiration in the study of the normal child—the natural bud. Montessori¹³ found hers in the defective child—the aborted bud. This new model finds its inspiration in genius—the perfect blossom. It is in perfect harmony with the other two as far as they go, but the new model absorbs all their discovery and goes further as suggesting a new education, universal in appeal, for all the peoples of the world and for all the ages.

¹ Elmer Gates was a virtuoso inventor who's better known inventions include the foam fire extinguisher, an improved electric iron, a climate-controlling air conditioner, and the educational toy "Box and Blocks." Despite his extraordinary output as an inventor, Gates saw himself as a psychologist. He pursued invention primarily to study the processes of the mind while it engaged in its best work. See http://www.elmergates.com/

 $^{^2}$ Jean Anthelme Brillat-Savarin (1755-1826) was a French lawyer and politician. He gained fame as an epicure and gastronome

³ Aeschylus Aeschylus (Ancient Greece; c. 525 BC – c. 456 BC) was the first of the three ancient Greek tragedians whose work has survived until modern times. He is often described as the father of tragedy.

⁴ George Gordon Byron, 6th Baron Byron (1788 – 1824), otherwise known as Lord Bryan, was a British poet and a leading figure in the Romantic movement. He is regarded as one of the greatest British poets and remains widely read and influential.

- ⁵ Heinrich Schliemann (1822 –1890) was a German businessman and amateur archaeologist. He is most famous for being an advocate of the historical reality of places mentioned in the works of Homer and for helping excavate Troy.
- ⁶ Thomas Babington Macaulay, (1800 –1859) was a British poet, historian and politician. He wrote extensively as an essayist and reviewer, and on British history. He also held political office as Secretary at War between 1839 and 1841 and Paymaster-General between 1846 and 1848. A New Times article, "Lord Macaulay's Memory", published 7 May 1876 provides insight into Jordan's reference. In the article it references an event that occurred with Macaulay was thirteen years old. While waiting for a carriage he read from a local paper two poems. Having never seen them again he was able to recite them word for word forty years later.
- Nathaniel Hawthorne (1804 –1864) was an American novelist and short story writer. He works include The Scarlet Letter and The House of Seven Gables.
- ⁸ Ignacy Jan Paderewski (1860 1941) was a Polish pianist, composer, diplomat, politician, and the second Prime Minister of the Republic of Poland.
- ⁹ William Harvey (1578 1657) was an English physician who first described, completely and in detail, the systemic circulation and properties of blood being pumped to the body by the heart
- ¹⁰ Sir Henry Irving (1838 1905), was an English stage actor in the Victorian era.
- ¹¹ Eugen Sandow (1867 1925), is known as the "father of modern bodybuilding."
- ¹² Friedrich Wilhelm August (1782 1852) was a German pedagogue, a student of Pestalozzi who laid the foundation for modern education based on the recognition that children have unique needs and capabilities. He developed the concept of the "kindergarten", and also coined the word now used in German and English.
- ¹³ Maria Montessori (1870 1952) was an Italian physician and educator, a noted humanitarian and devout Catholic best known for the philosophy of education which bears her name. Montessori education is characterized by an emphasis on independence, freedom within limits, and respect for a child's natural psychological development, as well as technological advancements in society.