

Shaunessy, E., McHatton, P.A., Hughes, C., Brice, A., & Ratliff, M.A. (2007). Understanding the experiences of bilingual Latino/a adolescents: Voices from gifted and general education. *Roeper Review*, 29, 174-182.

Shumow, L. (1997). Daily experiences and adjustment of gifted low-income urban children at home and school. *Roeper Review*, 20, 35-38.

Sternberg, R.J. (2007). Cultural concepts of giftedness. *Roeper Review*, 29, 160-165.

Terman, L.M. (1925). *Genetic studies of genius. Vol. 1. Mental and physical traits of a thousand gifted children.* Stanford, CA: Stanford University Press.

Zucker, S.H. & Prieto, A.G. (1977). Ethnicity and teacher bias in educational decisions. *Journal of Instructional Psychology*, 4, 2-5.

An Interview with M.K. Raina: About Creativity

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(1) I understand that you received a most prestigious award in 2006. Could you tell us about it?

The Georgia Association for Gifted Children's *E. Paul Torrance Creativity Award* recognizes outstanding achievement in areas related to the study and/or promotion of creativity. Any individual (student, parent, teacher, administrator, or community leader) who has advanced the life long work of Dr. E. Paul Torrance through scholarly work on creativity, individual creative productivity, or helping in the recognition and development of creative potential in others is eligible for this award. Nominations are submitted to a review panel, established by the Awards Committee, for screening.

The contributions of this individual should have had a significant impact over time. The sustained efforts of nominees shall have positively influenced others—either directly or through a ripple effect—and/or show promise for continued influence on the field and/or the creativity of others (e.g., students, teachers, other professionals). Preference is given to nominees whose work has had (or shows strong potential to have) a positive impact on gifted students in the state of Georgia.

The contribution(s) of this individual should have a clear relationship to one or more areas of Dr. Torrance's work. These include, but are not limited to: creative problem solving; Future Problem Solving; assessing and identifying creativity, including the use of *The Torrance Tests of Creativity*; the recognition of creative strengths in economically disadvantaged students; mentoring; developing creativity in students, especially those from undeserved populations; using the *Incubation Model of Teaching*; and other types of curriculum.

The recipient is acknowledged with an original three-dimensional award, created by a Georgia student, which represents the spirit of Dr. Torrance's work as a researcher, teacher, and mentor. Personally, I consider receiving this Award a real honor which makes me think more seriously of his "Manifesto" and the ways in which one can achieve some of those goals. It is my great honor that my name will be associated with the name of Dr. Torrance whom I have known for ages.

Receiving this Award from the Georgia Association is very dear and valuable to me since Dr. Torrance was a native Georgian.

Torrance served as an exemplar of a life which became a legend in its own way. Torrance's life was well lived and hopefully won't be forgotten soon. The *Bhagavad Gita* mentions this idea: "Whatever the best person does, exactly that do other people do; people follow the *pramanam* he sets" (III.21). People know of the example of this "best" person whose life becomes a means to others. As far as I know, he did not believe in the passivity of having, but in the creativeness of being. Detesting manipulation, he abhorred establishing his credibility-by-association in his field of work. He made tremendous voyages in discovering and nurturing creativity. He did not care for rejection, ridicule, and opposition. Remaining totally immersed in his work, he did to the very last what I call "*srijansadhna*" (a Hindi term referring to a person who is devoted to and in search of learning and knowledge about creativity). I will always remain grateful to him for the ways he used to nurture me, and many more in different lands and circumstances.

(2) What are some other awards have you received over the years?

My contributions to the discipline have received recognition in the form of several awards, including the Professor V.K.R.V. Rao Award in Psychology for 1985. This award, instituted by The Institute of Social and Economic Change, Bangalore, India, is administered by the Indian Council of Social Science Research. The award is for "those Indian Scholars who have made a significant original contribution to human knowledge and progress, applied or fundamental in the specified fields of social science and who are below the age of 45 years of the year to which the award relates." In 1992 and 2006, I was nominated for the National Association for Gifted Children's E. Paul Torrance Award. In 1996, I was awarded the First World Council Creativity Award of the World Council for Gifted and Talented Children. The World Council described me as "an outstanding model of creative thinking, as well as a promoter of the importance of creativity."

(3) What first got you interested in creativity?

During my graduate studies, I recall having read a book review of an outstanding, though controversial, work on creativity, entitled "*Creativity and Intelligence*" by Getzels and Jackson (1962) in the *Journal of Educational Research*. This research took me to many other important works of Terman, Cattell, Guilford, Maslow, Torrance, MacKinnon, Taylor, Bruner, Barron, McClelland, Vernon, Liam Hudson, and also the monumental Utah series on creativity. These works prompted me to examine the correlates of creativity in a different culture, distinctly different from the Western culture. In doing my studies, Torrance's monumental report on his cross-cultural research in creativity provided something like a "crystallizing experience." However, as my interest in creativity became broad based, I was exposed to a wide variety of philosophical, psychological, sociological, scientific and artistic aspects which made me realize that the concept of creativity was not new to those societies which are called indigenous and "developing" societies. At that point in time, I found a sound psychometric approach to creativity quite rewarding and devoted a great deal of my time and energy in studying how Torrance's creativity measures worked in non-Western cultures, like India. It is then that I got into the area of manifest theory of creativity, and with my father studied teacher-educator perceptions about ideal child. This and other studies along these lines by me motivated many scholars to study the perceptions about the ideal child/student in diverse cultures.

In the Indian context, my fascination with creativity was further reinforced by the scientific works of Manas Raychaudhuri in the field of musical and artistic creativity. Further, Anand Coomaraswamy and Kapila Vatsyayan's works on Indian art and aesthetics, M. N. Srinivasa's on Indian sociology, Ashis Nandy's on Srinivasa Ramanujan and Mulk Raj Anand's on giftedness in Indian society enriched my ideas about creativity. Sumitranandan Pant's literary genius, characterized by romanticism, mysticism and symbolism, made me realize what shape and form creativity can take. Indian philosophy and some indigenous sources were instrumental in crystallizing my ideas about how to develop creativity. It was during those days that I was fortunate to receive a copy of *Applied Imagination* from Alex F. Osborn, who acknowledged the inputs he had received from *Upanisadic* sources to formulate his ideas about brainstorming. That was revealing indeed. Those were the days when creativity research was resilient, fresh and alive. Not much reinventing of the wheel. It was ecstatic to work in this young, but infinitely challenging field.

(4) What have you published on creativity?

My works on creativity, talent and giftedness, as categorized into various groups, may provide some idea of what has interested me during about the last forty years of my professional life. I have not mentioned those works which are not directly related with these areas.

Assessing Creativity. I started working on creativity tests in 1964 and based on research and experiences gained from data collected from various groups, I made a strong case for their use in talent search programs. I also pleaded for widening the concept of giftedness and talent (see *Talent Search in the Third*

World, 1995, Foreword by Harry A. Passow). I initiated with the help of my doctoral students, studies on the follow up of the creatively gifted, providing evidence relative to the predictive validity of the Torrance Tests of Creative Thinking. With the use of these tests, I was able to provide evidence about the creative positives of the disadvantaged. Using the Torrance tests and his perspective on creativity, I made a number of studies on cross-cultural comparisons. Teachers, school students, university students, disadvantaged boys and girls, high caste, low caste, students from different regions in India were studied.

Implicit Theory of Creativity. I attempted numerous studies on the ideal child/pupil to provide indications about implicit theories of creativity in various cultures. These studies became catalysts for many researchers around the world to plan their study on how the ideal child/pupil is perceived in different countries. These studies have also provided data to various researchers engaged in cross-cultural research for conceptualizing implicit theories of creativity. A study on cross-cultural perspectives on parents' and teachers' implicit theories of children's creativity was published in the *Creativity Research Journal* in 2002. Torrance has documented my studies in his various publications and the way they led to further exploration.

Personality, Motivation and Creativity. Most of my studies and the studies of my doctoral students have focused on creativity as related to personality and motivational factors in various groups. Besides very many personality and motivational measures, Torrance's 'Creative Motivation Scale' and Khatena's 'Something About Myself' became the basis for numerous studies to understand creative motivation in various cultures. I also developed a syllabus-bound, and syllabus-free inventory to study orientation of creative students. Cognitive styles, sex differences, openness to inner experience, life goals, achievement motivation, modes of information processing, type A and type B personality and a host of other personality variables were studied in the context of creative behavior.

Social and Cultural Change and Changes in Creative Functioning. During the mid eighties, I made cross-era comparisons to study any changes that had taken place in the fourth grade slump, sex-differences, performance on creativity tests, teacher perceptions about the ideal child after a gap of around eighteen years. Developmental trends were studied in the context of social and cultural changes. Torrance supplied the data from his studies made in sixties. This study extended Torrance's work in terms of space and time. The report based on this research took the shape of a book.

Torrance Phenomenon. In 1996, I articulated the "Torrance Phenomenon" based on some aspects of Torrance's work, with illustrative examples in support of my arguments drawn from his research, particularly relating to national, international and cross-cultural inquiries.

Reading this work, Torrance (1993) became "very ecstatic about it." "I think," wrote Torrance, "it gets at the essence of my work, and it is done very beautifully." In the Foreword to this work, Torrance documented my "excellent job of capturing the excitement of my multi-cultural studies...." Torrance hoped, "that each reader will catch some of this enthusiasm." "If creativity researchers become familiar with this body of research, they would be less concerned about what they now see

as inconsistencies. It would be all meaningful," believed Torrance.

The "Torrance Phenomenon" generated some interest among the workers in the field of creativity, making Magyari-Beck to write on this theme in the *Creativity Research Journal*. Commenting on this work, Gudmund Smith, a Swedish researcher, wrote: "It has taught me more about the man and his research than I knew before." Roberta M. Milgram (1995) from Israel wrote: "All in all, though, Torrance has made a great contribution and your monograph will help to preserve the record of his achievements." Joe Khatena (1994) did mention: "My impression of the paper is that it is scholarly, and the link you have made of Western conceptions and theory of creativity and the Hindu conception of Lord Vishvakarma as the source of universal creativity is unique. It is a fitting tribute to Torrance's genius and I am glad to see it done by you."

Cross-Cultural Differences. As a result of a comprehensive review article (*Indian Educational Review*) on cross-cultural differences that I wrote in 1974, I got deeply interested in this fascinating area. In an international conference on creativity research in Buffalo, I presented evidence to support my contention that creativity research was, by and large, ethnocentric (see Isaksen, 1993) and we need to study creativity in a broader context. I wrote on the mythical paradigm and on creative communion in different cultures for Morris Stein's *Creativity's Global Correspondents* (1998, 1999). I published on cross-cultural differences in manifest theories and studied creative functioning and talent processes across nations. In 2002, I spoke on the "garland approach to creativity" in an international conference on cultural diversity and creativity in the UK. However, in my keynote address to the World Conference on Gifted Children in 1987, I also pleaded for recognizing indigenous creativity. I was invited to write on "cross-cultural differences" for Mark Runco's (2000) *Encyclopedia of Creativity*.

Insights from Cross-Cultural Studies. By synthesizing Torrance's cross-cultural studies (1996), I derived several new insights. I concluded: "Multicultural exposure provides a vast and variegated foundation to salvage some neglected and complex facts. It provides sensitive respect for others' values and facilitates communication between members of different cultures by recognizing and accepting the deep seated complexes which color our own outlook as well as those of other interlocutors." Among the more specific insights that I discussed, some are as follows: (1) Creativity is an infinitely endless diverse phenomenon that provides meaning and purpose to many in life and a sense of purpose in relation to the cosmos; (2) The drops in creativity found in some cultures and the failure to reach a higher level of creativity is culturally and not biologically related; (3) one's conceptualization can get broadened and illuminated as a result of positive understanding of international insights; and (4) international networks of creative people can be a very powerful force for keeping world peace and for dealing with other threats that exist tomorrow.

Incubation Model, Curriculum and Hemispheric Specialization. During the late eighties, I became interested in research on hemispheric specialization and its implications for education and talent development. As a result, I wrote a book

(Foreword by E. Paul Torrance) on *Education of the Left and the Right* (1984), which takes further the argument of how curriculum, incorporating Torrance's incubation model and future problem solving techniques, can cultivate the two halves of the brain. Torrance has underlined the significant ways this book has contributed to curriculum and designing educational experiences. A precursor of this work was my article published in the *International Review of Education* (1979) of the UNESCO Institute of Education, Hamburg. Its prepublication draft was reviewed by Joseph Bogen and many others. Discussing the present incarnation of this journal, it was reassuring to read Christopher McIntosh's (2002) assessment: "A rare example of the neuropsychological perspective is provided by a highly interesting article in the first issue of 1979 by Maharaj Raina headed 'Education of the Left and the Right' and dealing with the functioning of the two hemispheres of the brain. The author writes that if education is to develop both sides of the brain, 'it should plan learning experiences which provide endless opportunities for a balance between the right hemisphere's spatial-synthetic modality and left hemisphere's verbal-analytical modality.' Arguably the journal could profit from more articles of this kind that bring together the realm of education with that of neurobiology, biochemistry, neurophysiology and other sciences." At one point, I worked with Torrance to refine the *Style of Learning and Thinking* (SOLAT), a measure of hemispheric preference, and test its use in other cultures. We attempted a cross-cultural study using this instrument. I studied its relationship with openness to experience, sex and subject choice.

Mentor Relationships. Torrance's work on mentoring provided many leads to me to further study its role in the development of creativity and talent development in indigenous cultures. I explored how mentoring in terms of the *Guru-shishya* relationship has occurred and evolved over a period of time and the way it is embedded in the history of a culture. Georgia Studies of Creative Behavior published a monograph based on this work I contributed to Torrance's project on transcultural research and mentoring, indicating the richness and complexity of mentoring relationships. *Psychology and Developing Societies* published this work in one of its issues. Using Torrance's framework, I studied the role of mentor relationships among the talented and how this role could be further strengthened.

Teacher Creativity. Creativity in teachers remained my interest during the initial years of my work. In 1970, I made a full scale study of creativity in teachers, followed by such studies as creativity and teaching success; creativity, teaching style, pupil control ideology; teacher educators' perceptions about the ideal pupil; effect of training on attitudes towards creative teaching and learning; creativity information awareness among teacher educators; ideational fluency and motivations of teachers under training; and creativity and anxiety in Indian teachers.

Training for Creativity. In 1968, a study by me related to the effect of competition on creativity was published in the *Gifted Child Quarterly*. However, later I got into creative problem solving and published works on the effects of creative problem solving on fluency of thinking. In 1972, I published a paper on school climate and creativity; curriculum for creative development; teaching for creative endeavors; creative teaching and learning; towards a model of creative teaching;

developmental models in creativity; developing creativity through investigatory projects; creativity and teaching of science.

Longitudinal Studies on Talent and Creativity. Using National Talent Search Scholars, I made various studies of their backgrounds including the causes of dropping out, attrition rates, academic performance, etc. to examine the validity of the tools used to identify them at various stages. In the light of the findings obtained, I made a strong plea for changes in the conceptualization of talent and ways to identify it. These studies have taken the form of various published monographs. By making extensive use of Torrance and Wallach-Kogan measures, I determined how the talent search programs in India were narrow in their nature and the way they were conceptualized. These studies are available in a book form. One quite large research, which was longitudinal in its scope and design, entitled *Talent in Perspective* (1991), made a follow up study of those scholars who were identified as talented almost twenty-eight years ago. Various measures of creativity, motivation, personality and a host of other variables were used in this study. This was in many ways similar to Anne Roe's study of scientists. I am glad to share that Howard Gruber did review the prepublication draft, and it made far reaching recommendations for conceptualizing and identifying talent and giftedness.

Creative People at Work. Of late, I have been interested in studying exceptionally creative people in various fields. For a long time, I have been interested in Tagore and his creativity, and accordingly applying the network of enterprise concept to this 1913 Nobel laureate. I described and analyzed the evolution of aspects of his creative work, including his overall purpose in undertaking various enterprises (*Creativity Research Journal*, 1997). In 2000, I was invited to write on Rabindranath Tagore for the *Encyclopedia of Creativity* edited by Mark Runco.

Further, I designed a rather comprehensive study (2000) to analyze Torrance in order to understand his creativity passion by dealing with such issues as to how creativity works, what a person does when he's being creative, how the creative person organizes and deploys his or her resources to do what few others have done, and how the special organization and special set of tasks come about. Torrance, "the founding father of creativity studies," became the subject of this study since he made a difference to the world of creativity in diverse ways, through his uniqueness and through his relationships with those who inhabit that world. The intention was to provide through research a fine perspective from which to appreciate the nature of Torrance's creativity, remaining true to the goal of contributing, if possible, to the scientific understanding of creativity and creativity passion.

The study of Torrance's networks of enterprise, through various phases of his professional life cycle provided the basis for defining his uniqueness, along with density, longevity, cyclicality and the branching nature of his enterprises. It also examined Torrance's moral responsibility as it became interwoven with other features of his creative career.

The making of an individual who became a 'legend' in his own lifetime provides insights into current and future workers in the

field, and with a perspective which will possibly facilitate the growth of the field. This study has shown how transformation through self-effort, resolve, exertion, and equanimity in the face of vicissitudes of life became central to Torrance's creativity and the diverse enterprises he undertook without any selfishness and thought of reward. Based on this study, it was made clear how a state of balance and patterns of commitment, a passion for purposeful protracted hard and unremitting work, besides wisdom, becomes basic to creativity.

Torrance (2000) in the prelude to this work (*Creativity Passion: E. Paul Torrance's Voyages of Discovering Creativity*) wrote: "At the outset, let me say that I greatly appreciate the devoted labor that my friend, M K. Raina, has lavished in preparing this analytical biography of my life and work. This process is quite different from the historical biography that Garnet Millar has presented. I knew that Professor Raina was well equipped to do this kind of task. He has been involved in creativity research for over 32 years and perhaps knows my research better than anyone else. In the process of preparing this biography, he has asked many searching questions that have caused me to understand myself and my work better."

In his foreword to this work, Gruber (2000) wrote: "This is a fine book. It does not need this foreword to explain it, for the book constitutes its own best explication and defense." Reading this book, Gruber was reminded of van Gogh's remark to his brother, responding to a letter in which Theo rhapsodized about some works of art he had seen. Said Vincent: " 'People do not admire enough.' To his credit Raina is an enthusiastic admirer." To understand the nature of literary creativity in the Indian context, a study (*Psychological Studies*, 2001) was designed to examine the contributions of 38 *Jnanpith* awardees, recipients of the highest literary award in India, employing a case study approach. It analyzed the life course, network of enterprises, and the creative process of these awardees. Recently, in 2006, I contributed to the *Creativity Research Journal's* special issue on E. Paul Torrance, on his life and works and carried further my analysis of him as a person with what I called "creativity passion."

International Perspectives on Creativity Research.

International creativity research has interested me a great deal. With help from scholars in different countries, I was able to compile two volumes on international perspectives. The first volume (1980) with a foreword by J.P. Guilford included contributions from leading scholars from both the East and the West. Harry Passow spoke about this volume in his Presidential Address to the World Conference on Gifted and Talented. On his suggestion, I compiled a sequel to the 1980 volume during the late nineties which is published by the Hampton Press. I have contributed to the *UCLA Educator* (1976); *Journal of Research and Development in Education* (1971); *The Journal of Creative Behavior* (1969); *Worldwide Perspective on the Gifted Disadvantaged* (1993); *Gifted and Talented: Reaching their Potential* (1979); *G/C/T* (1985), and *Roeper Review* (2000) on developments regarding creativity and giftedness in India.

(5) Are we currently doing enough to encourage creativity?
I strongly believe that parents and teachers are not doing much

to encourage creativity. Many children remain neglected, not enjoying psychological safety and psychological freedom. Many of our youngest and most vulnerable children remain at great risk and it is there that we should invest time and energy to see creativity flourish. We need serious efforts to make them happy and joyful.

When I attempt to analyze the present educational situation dispassionately, I find many elements missing that are listed in Torrance's "Manifesto for Children." I don't want to debate on each and every item listed therein, but any intervention to be meaningful has to consider them seriously. I consider it crucial that children be prompted to take the present and future seriously and helped to discover creative ways to live harmoniously without conflict so as to value human safety and survival. It is vital that students understand ways of conflict resolution and

what it means to be morally creative, wise and graceful.

(6) What are you currently working on?

There are so many self-imposed tasks that I want to accomplish, but my limited resources have been frustrating. I am doing some reading and writing on "Communication and creativity," "Vak (Sanskrit for "word") and creativity," and "Raj Rao and creativity." Further, I am working actively on a book length manuscript on the "Indian approach to creativity." However, my top priority at this time is to analyze how a Japanese Nobel laureate in physics and another outstanding Indian particle physicist have approached creativity and its development. I enjoy doing this analysis. There are many more tasks in the pipeline and I keep shifting from one to another, depending on my mood and urge.

Humanities: A Contracted Curriculum

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In 1995, Gifted Education Press published my short textbook: *Quotations for Creative Insights and Inspiration: A Quotations Based Differentiated Humanities Curriculum for Gifted Students and their Teachers in Middle and High School* (followed in 1999 by a revised second edition of the same title). My intent through this writing was to use quoted expressions from throughout history to achieve two educational goals:

- to create a unique thematic approach for enhancing students' skills of debate, research, and expository writing
- to create a forum through which students could 'explore' the words of the great thinkers from history while simultaneously confronting challenges such as contradictions, ambiguities, and different interpretations.

My position as a classroom teacher offered the advantage of being able to 'field test' my ideas and make revisions based on realistic feedback. Thus, I felt confident that I had developed a resource that would benefit teachers of gifted, and, in many instances, mainstream students. However, less than robust sales soon made it evident that my confidence was unfounded. The question then became: Why?

Today, in educational circles, value for the humanities is held in low regard – an attitude that is evident at the highest echelon of influence. Compare the following:

To lift the standards of our public schools, we achieved historic education reform – which must now be carried out in every school and in every classroom, so that every child in America can read and learn and succeed in life. - President Bush's State of the Union Address January 28, 2003
[And] we can make sure our children are prepared for the jobs of the future, and our country is more competitive, by

strengthening math and science skills. - President Bush's State of the Union Address January 23, 2007

In President Bush's 2003 address, reading is considered a skill that promotes overall learning, and thus furthers the ability for one to "succeed in life." But in his 2007 address, math and science have become ends of education, and exist not to further individual growth, but to enhance employment and economic competitiveness.

Sadly, my own province of British Columbia has not been exempt from this trend away from courses that promote individual potential. In the mid-1990's, language arts, social studies, and second language acquisition studies were grouped together under the broad heading of "Humanities" and had their allocated time for instruction – to allow for the inclusion of computer skills and ICT (Information and Communication Technology) programs – reduced from 56% to 38%. Ironically, reduction of instructional time in those subjects that placed the highest premium on reading skills (language arts, social studies) occurred at the same time that 14 of the 30 students in my grade 7 class came from an ESL (English as a Second Language) background; 8 of whom had been in the country for two years or less and were reading at a primary level on a standardized reading test.

The humanities are also a victim of high-stakes testing initiatives. Recently, I spoke to a young lady who chose not to take grade 12 history – her course of preference – in favor of a science oriented option that would allow her to obtain a higher GPA toward ever more stringent university entrance requirements. In her words: "Why should I undertake the onerous tasks of reading, research, and writing, when all I have to do is learn a few facts and plug numbers into memorized formulas?" Granted, this attitude can be characterized as simplistic; but unfortunately, this young lady – while intelligent